

CURRICULUM VITAE

EVA ENKELMANN

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EDUCATION

- 2012 **Habilitation, Geology**, Eberhard Karls Universität Tübingen, Germany
Thesis: „Using geo- and thermochronometric methods to investigate tectonic and surface processes“.
- 2005 **Ph.D., Geology**, TU Bergakademie Freiberg, Germany
Thesis: “Fission-track dating: Calibration of the method and its application in the tectonics of eastern Tibet”.
- 2001 **Diploma, Geology**, TU Bergakademie Freiberg and Max-Planck-Institut für Kernphysik, Forschungsstelle Archäometrie, Heidelberg, Germany
Thesis: “The Tan-Lu Fault Zone at the eastern edge of the Dabie Shan (eastern China): A view from fission-track thermochronology”.

EMPLOYMENT

- 7/2020 – present Associate Professor (tenured) Department of Geoscience (now EEE), University of Calgary, Canada
- 9/2017–6/2020 Assistant Professor (tenure track) Department of Geoscience, University of Calgary, Canada
- 8/2016 – 8/2017 Associate Professor (tenured) Department of Geology, University of Cincinnati, USA
- 1/2013 – 7/2016 Assistant Professor (tenure track) Department of Geology, University of Cincinnati, USA
- 10/2009 – 10/2012 Research Scientist and Lecturer (non tenure track) University of Tübingen, Germany
- 10/2005 – 9/2009 Research Scientist at the Geochronology Lab at Lehigh University, Bethlehem, PA, USA. Supervisor: Peter Zeitler
- 2/2002 – 6/2005 German Research Foundation and DAAD Research Associate, Institut für Geologie, TU Bergakademie Freiberg, Germany. Supervisor: Lothar Ratschbacher
- 8/2001 – 12/2001 Research Associate at the Max-Planck-Institut für Kernphysik, Forschungsstelle Archäometrie, Heidelberg, Germany. Supervisor: Günter Wagner.

AWARDS & HONORS

- 2023 Outstanding Achievement Award of the Faculty of Science, University of Calgary
- 2022 Fellow of the Geological Society of America
- 2018 Exceptional Reviewer for GSA Journal *Lithosphere*
- 2017 Rising Star Award of the College of Arts & Sciences, University of Cincinnati
- 2001 Bernhard-von-Cotta Prize for the Best Diploma Thesis of the TU Bergakademie Freiberg

RESEARCH

I am interested in understanding the interaction between tectonics and climate-driven surface processes. I am using geo- and thermochronometric methods to quantify the timing, amount, and rate of rock cooling and exhumation. I apply these methods to the scale of entire orogens (100s of km) and individual faults (<10 km), and link orogenic processes to adjacent sedimentary basins using innovative methods of multi-analyses conducted on individual detrital mineral grains. My research has been highly collaborative. I work with experts in the field of sedimentology, geophysics, geomorphology, petrology and nuclear physics. In addition to geological applications, I have a strong interest in advancing thermochronometric methods including fission-track analysis and (U-Th)/He dating.

RESEARCH FUNDING

Note: amounts refers to funding portion to me.

Funding since employment at the University of Calgary (all CA\$)

2024–2029	\$ 255,000	NSERC - Discovery Grant (sole PI) <i>Developing in-situ multi-analysis dating techniques to answer new geological questions</i>
2024–2026	\$ 170,000	American Chemical Society–PRF New Directions (sole PI) <i>Extracting thermal history information from dispersed apatite (U-Th-Sm)/He data</i>
2023–2024	\$ 14,180	Departmental overhead funds to promote Collaborative Research <i>Grant writer for CFI-Innovation Fund proposal</i>
2020–2025	\$ 145,000	NWT Geologic Survey (sole PI) <i>Liard Basin thermal history for geothermal energy potential</i>
2022–2025	\$ 103,800	NSERC Alliance Grant (Co-PI, total 6 PI, \$ 2,700,000) <i>Porphyry fertility and vectoring at the belt to deposit scale in BC.</i>
2022–2025	\$ 150,000	Natural Resources Canada – GeoNorth <i>Faults, fluids and landscape evolution in the Northern Cordillera</i>
2022–2024	\$ 10,000	International Research Partnership Workshop Grant UofC
2022–2024	\$ 50,000	Eyes High Postdoctoral fellowship matching funds of UofC Support of PDF Birk Haertel
2021–2022	\$ 20,080	Natural Resources Canada contract <i>Dating fault activity in SE Yukon</i>
2021–2022	\$ 14,350	Natural Resources Canada contract <i>Thermochronology studies in the Liard Basin</i>
2020–2021	\$ 23,700	Yukon Geological Survey contract <i>Exhumation in SE Yukon</i>
2018–2019	\$ 47,000	Natural Resources Canada contract <i>Richardson Mountains expedition and thermochronology studies</i>
2018–2019	\$ 12,000	Natural Resources Canada contract <i>Arctic Salt dome uplift Geo-and Thermochronology</i>
2018–2024	\$ 180,000	NSERC - Discovery Grant (sole PI) <i>Quantifying the inboard transfer of deformation in the Northern Canadian Cordillera</i>
2018–2024	\$ 96,000	NSERC - Northern Region Supplement (sole PI) <i>Quantifying the inboard transfer of deformation in the Northern Canadian Cordillera</i>
2017–2019	\$ 321,000	University of Calgary – Startup Funds

<i>External funding received during employment at the University of Cincinnati (all US\$)</i>		
2015–2017	\$ 110,000	American Chemical Society–PRF New Directions (sole PI) <i>Triggering a tectonic-climate feedback: The sedimentary record of tectonic-surface processes interactions in the St. Elias Range, AK</i>
2014 – 2016	\$ 100,057	National Science Foundation (NSF) Ocean Drilling Program (lead PI, total 6 PI's and \$400,000) <i>Expedition 341 Oriented Research - Linking Sediment Provenance and Strata Formation to Tectonic-Climatic Interactions along the southern Alaska Margin.</i>
2014 – 2017	\$ 190,000	NSF – Tectonics Program (co-PI, total 2 PI's, \$500,000) <i>Investigating the sedimentary record of differing modes of flat-slab subduction.</i>
2014	\$ 20,000	National Geographic Society – Explorer Fund (sole PI) <i>Mackenzie Mountains Expedition</i>
2013–2016	\$ 258,800	University of Cincinnati – Startup Funds
<i>Grants during employment at the University of Tübingen 2009–2012 (all EURO)</i>		
2013–2014	€ 67,600 +1 yr graduate student stipend	DFG German Research Foundation (lead PI, total 2 PI's) <i>Quantifying deformation and erosion at the Yakutat plate corner (SE Alaska) with integrated thermochronology and modeling</i>
2011–2013	€ 196,142 +2 yrs graduate student stipend	DFG German Research Foundation (lead PI, total 2 PI's) <i>Quantifying deformation and erosion at the Yakutat plate corner (SE Alaska) with integrated thermochronology and modeling</i>

PUBLICATIONS

PEER-REVIEW JOURNALS (n=85) H-index = 34 ([GoogleScholar](#) 10-2024); Total citations = 4069

*indicates supervised student, ** indicates supervised postdoc

- Gosselin, J.M., Biegel, K.M., Dettmer, J., Gilbert, H., Colpron, M., **Enkelmann, E.** 2024. Crustal stress near the Yakutat microplate collision from probabilistic earthquake focal mechanisms. *Canadian Journal of Earth Sciences*. *In press*
- **Härtel, B., Vermeesch, P., **Enkelmann, E.**, Glorie, S. 2024. Ghost components in detrital thermochronology. *Chemical Geology* 122406. [Link](#)
- *Khodaparast, S., Madanipour, S., **Enkelmann, E.**, Hessami, K., Nozaem, R. 2024. Time constraints on the late Cenozoic fault evolution along the northern margin of the Iranian Plateau. *Tectonics*, 43, e2023TC008034 [Link](#)
- **Härtel, B., & **Enkelmann, E.**, 2024. The daughter-parent plot: a tool for analyzing thermochronological data. *Geochronology* 6, 429–448. [Link](#)
- Biegel, K.M., Gosselin, J.M., Dettmer, J., Colpron, M., **Enkelmann, E.**, Caine, J.S., 2024. Earthquake relocations delineate discrete fault network and deformation corridor throughout Southeast Alaska and Southwest Yukon. *Tectonics* 43, e2023TC008140. [Link](#)
- **Härtel, B., **Enkelmann, E.**, Jonckheere, R., Ludwig, T., Krause, J., Ratschbacher, L., 2024. In search of lost time: Raman thermochronology of FC1 zircon. *Contributions to Mineralogy and Petrology*, 179, 2. [Link](#)

7. **Stephan, T., **Enkelmann, E.** Kroner, U., 2023. Analyzing the horizontal orientation of the crustal stress adjacent to plate boundaries. *Scientific Reports*, 13, 15590. [Link](#)
8. **Härtel, B., Matthews, W., **Enkelmann, E.** 2023. Duluth complex FC1 apatite and zircon: reference materials for (U-Th)/He dating? *Geostandards and Geoanalytical Research*, 47,3, 669–681. [Link](#)
9. *Damant, K.A., **Enkelmann, E.**, Jess, S. 2023. Prolonged Post-Orogenic Extension in the Southeastern Canadian Cordillera: Miocene Reactivation of the Columbia River Fault. *Tectonophysics* 229763. [Link](#)
10. **Jess, S.A., **Enkelmann, E.**, Matthews, W. 2023. The effect of sediment transport in glaciated catchments on multiminerall detrital geochronology: deciphering contrasting zircon and apatite U-Pb dates. *JGR-Earth Surface* 128, e2022JF006738. [Link](#)
11. *Johns-Buss, E.G., Beranek, L.P., **Enkelmann, E.**, Jess, S., Matthews, W., 2023. Exhumation history and Early Cretaceous paleogeography of the Newfoundland margin revealed by detrital zircon U-Pb and fission-track studies of syn-rift Hibernia Formation strata. *Marine and Petroleum Geology* 148, 106055. [Link](#)
12. **Jess, S.A., **Enkelmann, E.**, Matthews, W. 2022. Why are the Appalachians high? New insights from detrital apatite laser ablation (U-Th)/He dating. *Earth and Planetary Science Letters*, 597, 117794. [Link](#)
13. Min, M., Ratschbacher, L., Franz, L., Hacker, B. R., **Enkelmann, E.**, Eko Yoan Toreno, Jonckheere, R., Härtel, B., Schurr, B., Tichomirowa, M., Pfänder, J.A., 2022. The evolution of the Eastern Himalayan syntaxis revealed by India (Tethyan Himalaya Series) in central Myanmar. *Geophysical Research Letters* 49, e2022GL099140. [Link](#)
14. Flowers, R., Ketcham, R., **Enkelmann, E.**, Gautheron, C., Reiners, P., Metcalf, J., Danisik, M., Stockli, D., and Brown, R., 2022. (U-Th)/He chronology: Part 2. Considerations for evaluating, integrating and interpreting conventional individual aliquot data. *GSA Bulletin*. 135 (1-2): 137–161. **Invited** [Link](#)
15. Flowers, R., Zeitler, P.K., Danisik, M., Reiners, P., Gautheron, C., Ketcham, R., Metcalf, J., Stockli, D., **Enkelmann, E.**, and Brown, R., 2022. (U-Th)/He chronology: Part 1. Data, uncertainty, and reporting. *GSA Bulletin* 135 (1-2): 104–136. **Invited** [Link](#)
16. **Jess, S., **Enkelmann, E.**, Grasby, S., Fraser, K., 2021. Determining the longevity of hydrothermal systems using thermochronology and thermal modelling. *JGR–Earth Surface* 126, e2021JF006286. [Link](#)
17. *Fraser, K., **Enkelmann, E.**, Jess, S., Gilbert, H., Grieco, R., 2021. Resolving the Cenozoic History of rock Exhumation along the central Rocky Mountain Trench using apatite low-temperature thermochronology. *Tectonics*, 40, e2021TC006847. [Link](#)
18. *Arkle, J., Weber, J., **Enkelmann, E.**, Owen, L., Govers, R., Jess, S., Denison, C., O’Sullivan, P., Donelick, R., 2021. Exhumation of the Costal Metamorphic Belt above the Subduction-to-Transform Transition, in the Southeast Caribbean Plate Corner. *Tectonics*, 40, e2020TC006414. [Link](#)
19. **Enkelmann, Eva**, and Jonckheere, Raymond, 2021. Fission Track Dating. In: Alderton, David; Elias, Scott A. (eds.) *Encyclopedia of Geology*, 2nd edition. vol. 6, pp. 116-131. United Kingdom: Academic Press. **Invited Book Chapter** [Link](#)
20. **Enkelmann, Eva**, and Falkowski, Sarah, 2021. Deformation between the highly oblique Yakutat–North American plate boundary and the Eastern Denali Fault: *Geosphere*, v. 17, 6, 2123–2143. [Link](#)
21. *McKay, R., **Enkelmann, E.**, Hadlari, T., Matthews, W., Mouthereau, F. 2021. Cenozoic exhumation history of the eastern margin of the northern Canadian Cordillera. *Tectonics*, 40, e2020TC006582. [Link](#)

22. *Choi, M., Eaton, D., **Enkelmann, E.**, 2021. Is the eastern Denali Fault active? *Geology*, v. 49, p. 662–666. [Link](#)
23. *Khodaparast, S., Madanipour, S., **Enkelmann, E.**, Nozaem, R., Hessami, K., 2020. Fault inversion in central Iran: evidence of post Pliocene intracontinental left lateral kinematics at the northern Iranian Plateau margin. *Journal of Geodynamics*. 140, 101784. [Link](#)
24. Jess, S., Koehn, D., Fox, M., **Enkelmann, E.**, Sachau, T., Aanyu, K., 2020. Paleogene Initiation of the Western Branch of the East African Rift: the uplift history of the Rwenzori Mountains, Western Uganda. *Earth and Planetary Science Letters* 552, 116593. [Link](#)
25. *Pickering, J., Matthews, W., **Enkelmann, E.**, Guest, B., Sykes, C., Koblinger, B., 2020. Laser Ablation U-Th-Sm/He dating of apatite. *Chemical Geology* 548, 119683. [Link](#)
26. Abdulhameed, S., Ratschbacher, L., Jonckheere, R., Gągała, Ł., **Enkelmann, E.**, Käßner, A., Kars, M., Szulc, A., Kufner, S.-K., Schurr, B., Ringenbach, J.-C., Nakapelyukh, M., and Khan, J. 2020. Tajik Basin and Southwestern Tian Shan, Northwestern India-Asia Collision Zone: 2. Timing of Basin Inversion, Tian Shan Mountain Building, and Relation to Pamir-Plateau Collapse and Deep India-Asia Indentation. *Tectonics*, 39, e2019TC005873. [Link](#)
27. *Bootes, N., **Enkelmann, E.**, Lease, R., 2019. Late Miocene to Pleistocene source to sink record of exhumation and sediment routing in the Gulf of Alaska from detrital zircon fission-track and U-Pb double dating. *Tectonics* 38, 2703–2726. [Link](#)
28. **Enkelmann, E.**, Finzel, E., Arkle, J. 2019. Deformation at the eastern margin of the Northern Canadian Cordillera: potentially related to opening of the North Atlantic. *Terra Nova* 31, 3, 1-8. [Link](#)
29. *Schartman, A., **Enkelmann, E.**, Garver, J.I., Davidson, C. 2019. Uplift and Exhumation of the Russell Fiord and Boundary blocks along the northern Fairweather Transform Fault, Alaska. *Lithosphere*, 11 (2), 232–251. [Link](#)
30. **Enkelmann, E.**, *Sanchez Lohff, S.K., Finzel, F.S. 2019. Detrital Zircon double-dating of forearc basin strata reveals magmatic, exhumational, and thermal History of Sediment Source Areas. *GSA Bulletin*, v.131, no. 7/8, p. 1364–1384. [Link](#)
31. Reid, M.R., Finzel, E.S., **Enkelmann, E.**, McClelland, W.C. 2018. Detrital zircon provenance of Upper Jurassic-Upper Cretaceous forearc basin strata on the Insular terrane, south-central Alaska. *in* Ingersoll, R.V., Lawton, T.F., and Graham, S.A., eds., *Tectonics, Sedimentary Basins, and Provenance: A Celebration of William R. Dickinson's Career: Geological Society of America Special Paper* 540, 571–590. [Link](#)
32. *Madanipour, S., Yassaghi, A., Ehlers, T.A., **Enkelmann, E.**, 2018. Tectonostratigraphy, Structural Geometry and Kinematics of the NW Iranian Plateau Margin: Insights from the Talesh Mountains, Iran. *American Journal of Science* 318, 208-245. [Link](#)
33. *Madanipour, S., Ehlers, T.A., Yassaghi, A., **Enkelmann, E.**, 2017. Accelerated middle Miocene exhumation of the Talesh Mountains constrained by U-Th/He thermochronometry: evidence for the Arabia–Eurasia collision in the NW-Iranian Plateau. *Tectonics* 36, 1538-1561. [Link](#)
34. Yang, Z., Shen, C., Ratschbacher, L., **Enkelmann, E.**, Jonckheere, R., Wauschkuhn, B., Dong, Y. 2017. Sichuan Basin and Beyond: Eastward foreland growth of the Tibetan Plateau from an integration of Late Cretaceous- Cenozoic fission-track and (U-Th)/He ages of the eastern Tibetan Plateau, Qinling, and Daba Shan. *JGR-Solid Earth* 122, 4712–4740. [Link](#)
35. Zeitler, P.K., **Enkelmann, E.**, Thomas, J., Watson, B., Ancuta, L.D., Idleman, B.D. 2017. Solubility and trapping of helium in apatite. *Geochemica et Cosmochemica Acta* 209, 1-8. [Link](#)

36. Finzel, Emily, and **Enkelmann, Eva**, 2017. Miocene-Recent sediment flux in the south-central Alaskan forearc basin governed by flat-slab subduction. *Geochem. Geophys. Geosyst.*, 18, 1739–1760. [Link](#)
37. *Dunn, C.A., **Enkelmann, E.**, Ridgway, K.D., Allen, W.K., 2017. Source to sink evaluation of sediment routing in the Gulf of Alaska and Southeast Alaska: a thermochronometric perspective. *JGR-Earth Surface*, 122, 711-734. [Link](#)
38. Rutte, D., Ratschbacher, L. Khan, J., Stübner, K. Hacker, B. R., Stearns, M.A., **Enkelmann, E.**, Jonckheere, R., Pfänder, J. A, Sperner, B., Tichomirowa, M. 2017. Building the Pamir-Tibet Plateau—Crustal stacking, extensional collapse, and lateral extrusion in the Central Pamir: 2. Timing and Rates. *Tectonics*, 36, 3, 385-419. [Link](#)
39. **Enkelmann, E.**, Piestrzeniewicz, A., Falkowski, S., Stübner, K., Ehlers, T.A., 2017. Thermochronology in southeast Alaska and southwest Yukon: Implications for North American Plate Response to Terrane Accretion. *Earth and Planetary Science Letters*, 457, 348–358. [Link](#)
40. Käßner, A., Ratschbacher, L., Jonckheere, J., **Enkelmann, E.**, Khan, J., Sonntag, B.-L., Gloaguen, R., Gadoev, M., Oimahmadov, I., 2016. Cenozoic intra-continental deformation and exhumation at the northwestern tip of the India-Asia collision-southwestern Tian Shan, Tajikistan and Kyrgyzstan. *Tectonics*, 35, 9, 2171-2194. [Link](#)
41. Finzel, E., **Enkelmann, E.**, Falkowski, S., Hedeon, T., 2016. Long-term forearc basin evolution in response to changing subduction styles in southern Alaska. *Tectonics*, 35, 7, 1735-1759. [Link](#)
42. Lease, R.O., Ehlers, T.A., **Enkelmann, E.**, 2016. Large along strike variations in the onset of Subandean deformation: Implications for Central Andes orogenic growth. *Earth and Planetary Science Letters*, 451, 62–76. [Link](#)
43. *Falkowski, S. and **Enkelmann, E.** 2016. Upper crustal cooling of the Wrangellia Composite Terrane in the northern St. Elias Mountains, western Canada. *Lithosphere*, 8, 359–378. [Link](#)
44. Georgieva, V., Melnick, D., Schildgen, T.F., Ehlers, E., Lagabrielle, Y., **Enkelmann, E.**, Manfred, S.R. 2016. Tectonic control on rock uplift and topography above oceanic-1 ridge collision – Southern Patagonian Andes (47°S), Chile. *Tectonics*, 35, 1317–1341. [Link](#)
45. *Falkowski, S., **Enkelmann, E.** Drost, K., Pfänder, J.A., Stübner, K., Ehlers, T.A. 2016. Cooling history of the St. Elias syntaxis, southeast Alaska, revealed by geo- and thermochronology of cobble-size glacial detritus. *Tectonics*, 35, 447-468. [Link](#)
46. **Enkelmann, E.** and Garver, J.I., 2016. Low-temperature thermochronology applied to ancient settings. *Journal of Geodynamics* 93, 17–30. **Invited Review Article.** [Link](#)
47. Gulick, S.P.S., Jaeger, J.M., Mix, A.C., Asahi, H., Bahlburg, H., Belanger, C., Berbel, C.B.B., Childress, L., Cowan, E., Drab, L., Forwick, M., Fukumura, A., Ge, S., Gupta, S., Kioka, A., Konno, S., LeVay, L., März, C., Matsuzaki, K., McClymont, E., Moy, C., Müller, J., Nakamura, A., Ojima, T., Ribeiro, F.R., Ridgway, K., Romero, O., Slagle, A., Stoner, J., St-Onge, G., Suto, I., Walczak, M.D., Worthington, L., Bailey, I., **Enkelmann, E.**, Reece, R., Schwarz, J.M., 2015. Mid-Pleistocene climate transition drives net mass loss from rapidly uplifting St. Elias Mountains, Alaska. *PNAS*, 112, 49, 15042-15047. [Link](#)
48. **Enkelmann, E.**, Koons, P.O., Pavlis, T.L., Hallet, B., Barker, A., Elliott, J., Garver, J.I., Gulick, S.P.S., Headley, R.M., Pavlis, G.L., Ridgway, K.D., Ruppert, N., van Avendonk, H., 2015. Cooperation of tectonic and surface processes produces Earth’s highest coastal mountains. *Geophysical Research Letters*, 42, 14, 5838-5846. [Link](#)
49. **Enkelmann, E.**, and Ehlers, T.A., 2015. Evaluation of detrital thermochronology for quantification of glacial catchment denudation and sediment mixing. *Chemical Geology*, 411, 299-309. [Link](#)
50. Ehlers, T.A., *Szameitat, A., **Enkelmann, E.**, Yanites, B.J., Woodsworth, G.J. 2015. Identifying Spatial Variations in Glacial Erosion with Detrital Thermochronology, Coast Mountains British

- Columbia. *Journal of Geophysical Research – Earth Surface*, 120, 1023–1039. [Link](#)
51. **Enkelmann, E.**, Ehlers, T.A., *Merli, G. Methner, K., 2015. Thermal and exhumation history of the Eocene Chumstick Basin, Washington State, USA. *Tectonics*, 34, 951–969. [Link](#)
 52. Barlow, N.L.M., and Koehler, R.D., comp. (**E. Enkelmann** chapter author), 2015, Seismic and non-seismic influences on coastal change in Alaska--Fieldtrip guide and conference abstracts, 5th International Conference of IGCP 588: *Alaska Division of Geological & Geophysical Surveys Guidebook 12*, 165 p. **Invited contribution** [Link](#)
 53. Deng, B., **Enkelmann, E.**, Liu, S., Li, Z., Ehlers, T.A., Jansa, L. 2015. Late Miocene accelerated exhumation of the Daliang Mountains, southeastern margin of the Tibetan Plateau. *Int. Journal of Earth Science (Geol. Rundschau)*, 104, 1061-1081. [Link](#)
 54. **Enkelmann, E.**, Valla, P.G., Champagnac, J.-D., 2015. Low-temperature thermochronology of the Yakutat Plate corner, St. Elias Range (Alaska): bridging short-term and long-term deformation. *Quaternary Science Review*, 113, 23–38. [Link](#)
 55. Pavlis, T.L., **Enkelmann, E.**, Gulick, S.P.S., Pavlis, G.L. 2014. Introduction: Neogene tectonics and climate-tectonic interactions in the southern Alaskan orogeny themed issue. *Geosphere* 10, no. 3., 1-4. [Link](#)
 56. *Falkowski, S., **Enkelmann, E.**, Ehlers, T.A. 2014. Constraining the area of rapid and deep-seated exhumation at the Yakutat plate corner, southeast Alaska. *Tectonics* 33, 597–616. [Link](#)
 57. **Enkelmann, E.**, Ridgway, K.D., Carignano, C., Linnemann, U. 2014. A thermochronometric view into an ancient landscape: tectonic setting, development, and inversion of the Paleozoic Paganzo basin, Argentina. *Lithosphere*, 6, 93–107. [Link](#)
 58. Zeitler, P.K., Meltzer, A.S., Brown, L., Kidd, W.S.F., Lim, C., **Enkelmann, E.**, 2014. Tectonics and topographic evolution of Namche Barwa and the easternmost Lhasa Block, in Nie, J., Hoke, G.D., and Horton, B., eds., Towards an improved understanding of uplift mechanisms and the elevation history of the Tibetan Plateau. Geological Society of America Special Paper 507, p. 23–58. [Link](#)
 59. McKeon, R.E., Zeitler, P.K., Pazzaglia, F.J., Idleman, B.D., **Enkelmann, E.** 2014. Decay of an old orogen: Interferences about Appalachian Landscape evolution from low-temperature thermochronology. *GSA Bulletin*, v. 126, no. 1-2, p. 31-46. [Link](#)
 60. *Madanipour, S., Ehlers, T.A., Yassaghi, A., Rezaeian, M., **Enkelmann, E.**, Bahroudi, A., 2013. Synchronous deformation on orogenic plateau margins: Insights from the Arabia–Aurasia Collision. *Tectonophysics*, 608, 440–451. [Link](#)
 61. *Grabowski, D., **Enkelmann, E.**, Ehlers, T.A. 2013. Spatial extend of rapid denudation in the glaciated St. Elias syntaxis region, SE Alaska. *JGR-Earth Surface*, 118, 1-18. [Link](#)
 62. Eichelberger, N., McQuarrie, N., Ehlers, T.A., **Enkelmann, E.**, Barnes, J.B., Lease, R.O. 2013. New constraints on the chronology, magnitude, and distribution of deformation within the central Andean orocline. *Tectonics*, 32, 1432–1453. [Link](#)
 63. Richardson, T., Ridgway, K. D., Gilbert, H., Martino, R., **Enkelmann, E.**, Alvarado, P. 2013. Neogene and Quaternary tectonics of the Eastern Sierras Pampeanas, Argentina: Active intraplate deformation inboard of flat-slab subduction. *Tectonics*, 32, 1-17. [Link](#)
 64. Yang, Z., Ratschbacher, L., Jonckheere, R., **Enkelmann, E.**, Dong, Y., Shen, C., Wiesinger, M., Zhang, Q. 2013. Late-stage foreland growth of China’s largest orogens (Qinling, Tibet): Evidence from the Hannan–Micang crystalline massifs and the northern Sichuan Basin, central China. *Lithosphere* 5, 420-437. [Link](#)
 65. Headley, R.M., **Enkelmann, E.**, Hallet, B. 2013. Examination of the interplay between glacial processes and exhumation in the Saint Elias Range, Alaska. *Geosphere* 9, 2, 229-241. [Link](#)

66. Cao, K., Bernet, M., Wang, G., van der Beek, P., Wang, A., Zhang, K., **Enkelmann, E.** 2013. Focused Pliocene–Quaternary exhumation of the Eastern Pamir domes, western China. *Earth and Planetary Science Letter* 363, 16–26. [Link](#)
67. **Enkelmann, E.**, Ehlers, T.A., Buck, G., Schatz, A.-K. 2012. Advantages and challenges of automated apatite fission track counting. *Chemical Geology*, 322–323, 278–289. [Link](#)
68. **Enkelmann, E.**, Ehlers, T.A., Zeitler, P.K., Hallet, B. 2011. Denudation of the Namche Barwa Antiform, Eastern Himalaya. *Earth and Planetary Science Letter*, 307, 323–333. [Link](#)
69. Finzel, E.S., Trop, J.M., Ridgway, K.D., **Enkelmann, E.** 2011. Upper-plate proxies for initiation of flat-slab subduction in southern Alaska. *Earth and Planetary Science Letters*, 303, 348–360. [Link](#)
70. **Enkelmann, E.**, Zeitler, P.K., Garver, J.I., Pavlis, T.L., Hooks, B.P. 2010. The thermochronological record of tectonic and surface process interaction at the Yakutat–North American collision zone in southeast Alaska. *American Journal of Science* 310, 231–260. [Link](#)
71. **Enkelmann, E.**, Zeitler, P.K., Pavlis, T.L., Garver, J.I., Ridgway, K.D. 2009. Intense localized rock uplift and erosion in the St Elias orogen of Alaska. *Nature Geoscience* 2, 5, 360–363. [Link](#)
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75. **Enkelmann, E.**, Weislogel, A., Ratschbacher, L., Eide, E., Renno, A., Wooden, J., 2007. How was the Triassic Songpan–Ganzi basin filled? A provenance study. *Tectonics* 26, TC4007. [Link](#)
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78. Ratschbacher, L., Franz, L., **Enkelmann, E.**, Jonckheere, R., Poerschke, A., Hacker, B.R., Dong S., Zhang, Y., 2006. The Sino-Korean-Yangtze suture, the Huwan detachment, and the Paleozoic-Tertiary exhumation of (ultra)high-pressure rocks along the Tongbai-Xinxian-Dabie Mountains Series/Source: Ultrahigh-pressure metamorphism; deep continental subduction. In Hacker, B.R., McClelland, W.C., Liou, J.G., (eds); *Special Paper - Geological Society of America* 403, 45–75. [Link](#)
79. **Enkelmann, E.**, Ratschbacher, L., Jonckheere, R., Nestler, R., Fleischer, M., Gloaguen, R., Hacker, B.R., Yue Qiao Zhang., Yin-Sheng Ma, 2006. Cenozoic exhumation and deformation of northeastern Tibet and the Qinling: Is Tibetan lower crustal flow diverging around the Sichuan Basin? *GSA Bulletin* 118, 651–671. [Link](#)
80. **Enkelmann, E.**, Jonckheere, R., Wauschkuhn, B., 2005. Independent fission-track ages (ζ -ages) of accepted and proposed apatite age standards and a comparison of ϕ -, Z-, ζ - and ζ_0 -ages: implications for method calibration. *Chemical Geology* 222, 232–248. [Link](#)
81. Jonckheere, R., **Enkelmann, E.**, Stübner, K., 2005. Observations on the geometries of etched fission and alpha-recoil tracks with reference to models of track revelation in minerals. *Radiation Measurements* 39, 577–583. [Link](#)

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83. **Enkelmann, E.**, Jonckheere, R., Ratschbacher, L., 2005. The effects of radiation damage accumulation and annealing for fission-track dating of titanite. *Nuclear Instruments and Methods B.* 227, 581-590. [Link](#)
84. **Enkelmann, E.**, Jonckheere, R., 2003. Correction factors for systematic errors related to the track counts in fission-track dating with the external detector method. *Radiation Measurements* 36, 351-356. [Link](#)
85. Grimmer J.C., Jonckheere, R., **Enkelmann, E.**, Ratschbacher, L., Hacker, B.R., Blythe, A., Wagner, G.A., Liu, S., Dong, S., 2002. Cretaceous–Cenozoic history of the southern Tan-Lu fault zone: Apatite fission-track and structural constraints from the Dabie Shan. *Tectonophysics* 359, 225-253. [Link](#)

Manuscripts currently in review

*Johns-Buss, E.G., Beranek, L.P., **Enkelmann, E.** Tracing polyphase fault reactivation and lithospheric evolution through Wilson cycles: Thermochronological insights from the Newfoundland Appalachians. *Tectonics*.

Stefan, T. & **Enkelmann, E.**, All Aligned on the Western Front? Analyzing the Stress Field in the Northern Cordillera of North America. *Tectonics*.

*Padgett, J., **Enkelmann, E.**, Kellett, D., Moynihan, D., Stephan, T. Cenozoic fault reactivation in the Upper Hyland River Valley, Yukon: A thermochronological perspective. *Canadian Journal of Earth Sciences*.

BOOKS

Enkelmann, Eva. 2023. Rocky Voices: The Memories of Minerals that Formed the Rocky Mountains. FriesenPress. pp. 126. Young adult non-fiction book. ISBN-10: 1039161545, ISBN-13: 978-1039161542

REPORTS (n=3)

1. *Pinto, T.F, **Enkelmann, E.**, Terlaky, V. 2023. T. Office of the Regulator of Oil and Gas Operations OROGO 2023-03-17 - Report - Final - SR-2021-002 - Laboratory Analytical Results.pdf <https://diims.gov.nt.ca/gnwt/llisapi.dll/link/180298818>
2. **Enkelmann, E.**, *Pinto, T.F., Matthews, W., Terlaky, V. 2023. Preliminary data for thermal evolution of Phanerozoic sediments of southwestern Northwest Territories. Northwest Territories Geological Survey, NWT Open Report 2022-001, 35 pages and digital data. <https://doi.org/10.46887/2022-001>
3. *Damant, K.A. and **Enkelmann, E.** 2022. Upper-crustal cooling history of the Intermontane Belt in southern British Columbia (parts of NTS 082E,092I, P, 093A, B, C); in Geoscience BC Summary of Activities 2021: Minerals, Geoscience BC, Report 2022-01, p. 11–20.

CONFERENCE CONTRIBUTIONS (n=159)

2024

Maitra, A., Härtel, B., **Enkelmann, E.**, 2024. Enhancing provenance analysis by laser ablation U-Pb and (U-Th)/He zircon double dating. American Geophysical Union Annual Fall Meeting, 9-13 December, Washington DC, USA

Enkelmann, E. and Stephan, T. 2024. Unveiling the Northern Cordilleran Puzzle: From the St. Elias to the Mackenzie Mountains. GSA Connect Annual Meeting, 22–25 September 2024. Anaheim, USA.

- Enkelmann, E.**, 2024. Stories in Stone: Bringing Earth's History to Life Through Geological Fiction. GSA Connect Annual Meeting, 22–25 September 2024. Anaheim, USA.
- Härtel, B., **Enkelmann, E.**, 2024. Unraveling the thermal-history information in sedimentary rocks: first results from zircon U/Pb-(U-Th)/He-Raman triple-dating. GSA Connect Annual Meeting, 22–25 September 2024. Anaheim, USA. (invited)
- Worthington, L., Gulick, S., Bruhn, R., Chapman, J., Elliott, J., **Enkelmann, E.**, Freymueller, J., Hallet, B., Koons, P.O. Pavlis, G., Ridgway, K., Ruppert, N., Spotila, J.A., van Avendonk, H., 2024. Mountains, Glaciers and Bears, Oh My!: The St. Elias Erosion/Tectonics Project (STEEP) and its Legacy for Active Tectonics and Team Science. GSA Connect Annual Meeting, 22–25 September 2024. Anaheim, USA.
- Jess, S., Schoenbohm, L., **Enkelmann, E.**, 2024. Changes in catchment dynamics in a retreating world: high resolution provenance analysis from detrital apatite. GSA Connect Annual Meeting, 22–25 September 2024. Anaheim, USA.
- *Boyd, A., Jepson, G., George, S., **Enkelmann, E.** 2024. Reconstructing the Propagation of Deformation in the Canadian Rocky Mountain Fold-Thrust Belt Using Low Temperature Thermochronology. GSA Connect Annual Meeting, 22–25 September 2024. Anaheim, USA.
- Min, Myo, Ratschbacher, L., Franz, L., Hacker, B.R., **Enkelmann, E.**, Trilsch, F., Schurr, B., Tichomirowa, M. 2024. The transition from continental collision to oceanic subduction in Myanmar. GeoSaxonia 2024, DGGV Annual Meeting 23-26 September, Dresden, Germany.
- Härtel, B., and **Enkelmann, E.**, 2024. First results from U-Pb-(U-Th)/He-Raman triple-dating of detrital zircon. Goldschmidt Conference, 18–23 August 2024. Chicago, USA.
- *Johns-Buss, E., Beranek, L., **Enkelmann, E.** 2024. Mesozoic rift-related exhumation along the Newfoundland margin recorded by low-temperature thermochronology. GeoConvention Calgary, 17–19 June, 2024.
- *Fontes Pinto, T., **Enkelmann, E.**, Terlaky, V. 2024. On the development of enhanced geothermal gradients in the southwestern Northwest Territories. GeoConvention Calgary, 17–19 June, 2024.
- Härtel, B., **Enkelmann, E.**, Whelan, E., Maitra, A., Johns-Buss, E., Jess, S., Matthews, W., Drummond, J., 2024. Multi-method dating of sediment and sedimentary rocks. Cordilleran Tectonics Workshop, Calgary, 1-3 March, 2024.
- Enkelmann, E.**, Matthews, W., *Padgett, J.A., 2024. Fold- and Thrust belt development and erosion of foreland basin strata across southern Alberta. Cordilleran Tectonics Workshop, Calgary, 1-3 March, 2024.
- *Padgett, J.A., **Enkelmann, E.**, Kellett, D.A., Moynihan, D., 2024. Cenozoic faulting in southeastern Yukon constrained by low-temperature thermochronology. Cordilleran Tectonics Workshop, Calgary, 1-3 March, 2024.
- Stephan, T. and **Enkelmann, E.**, 2024. All aligned on the western front of North America? – Present-day deformation in the diffuse plate boundary zone of Alaska-Canadian Cordillera. Cordilleran Tectonics Workshop, Calgary, 1-3 March, 2024.
- *Terbishaliev, B., **Enkelmann, E.**, Damant, K. 2024. Upper Crustal Exhumation History of the Intermontane Belt in the Southern Canadian Cordillera. Cordilleran Tectonics Workshop, Calgary, 1-3 March, 2024.
- *Johns-Buss, E., Beranek, L., **Enkelmann, E.** 2024. Late Paleozoic to Mesozoic bedrock exhumation in the Newfoundland Appalachians recorded by low-temperature thermochronology. Cordilleran Tectonics Workshop, Calgary, 1-3 March, 2024
- *Fontes Pinto, T., **Enkelmann, E.**, Terlaky, V. 2024. Influence of the Cordilleran evolution on the development of the geothermal anomaly in southwestern Northwest Territories – thermochronological constraints. Cordilleran Tectonics Workshop, Calgary, 1-3 March, 2024
- Jess, S., and **Enkelmann, E.**, 2024. Examining Cenozoic Extension across the Cordillera through low-temperature thermochronology. Joint Cordilleran and Rocky Mountain Section Meeting, Spokane WA 15-17 May 2024.
- Jess, S., **Enkelmann, E.**, Schoenbohm, L., 2024. Changes in erosion and sediment dynamics in a retreating world: high resolution provenance analysis from detrital apatite. EGU Annual Meeting, Vienna, Austria 14–19 April, 2024
- *Biegel, K., Gosselin, J., Dettmer, J., Colpron, M., **Enkelmann, E.**, Caine, J. 2024. Refining the nature of distributed and localized slip-partitioning of the Totschunda-Fairweather to Denali Corridor Using Earthquake Relocations and Focal Mechanisms. Seismological Society of America, 29 April – 3 May, 2024, Anchorage, AK.
- Beranek, L., Johns-Buss, E., **Enkelmann, E.**, Schwartz, S., 2024. Tectonic exhumation, volcanism, and source-to-sink processes in magma-poor rift systems: new perspectives from the Newfoundland margin. 8th Conjugate Margins Conference 27–29 May 2024 Lisbon, Portugal.
- *Johns-Buss, E., Beranek, L., **Enkelmann, E.** 2024. Late Paleozoic to Mesozoic bedrock exhumation along the Newfoundland margin recorded by low-temperature thermochronology. 8th Conjugate Margins Conference 27–29 May 2024 Lisbon, Portugal.

2023

- *Fontes Pinto, T., **Enkelmann, E.**, Terlaky, V. 2023. Investigating the geothermal anomaly in Northwest Territories with low-temperature thermochronology. Geoscience Forum, Yellowknife 15–17. November.

- *Fontes Pinto, T., **Enkelmann, E.**, Terlaky, V. 2023. Link between Cordilleran evolution and burial history of the Liard Basin, Northwest Territories. Geoscience Forum, Yellowknife 15–17. November.
- *Stephan, T. and **Enkelmann, E.**, 2023. Identifying stress anomalies in Alaska and the Canadian Cordillera using the spherical and statistical analysis of horizontal stress. American Geophysical Union Annual Fall Meeting December, Chicago.
- *Ridl, S.P., Finzel, E., **Enkelmann, E.** 2023. Testing the Geodynamic Controls on Sediment Dispersal Using Multi-Proxy Provenance Methods in the Marnoso-arenacea and Laga Basins, Northern and Central Apennines, Italy. GSA Annual Meeting Pittsburgh 15–18 October 2023
- *Padgett, J.A., **Enkelmann, E.**, Kellett, D.A., Moynihan, D., 2023. Low-temperature thermochronology reveals Cenozoic exhumation in the Upper Hyland valley, Yukon. International Conference on Thermochronology, Italy 3–10 September 2023.
- *Fontes Pinto, T., **Enkelmann, E.**, Terlaky, V. 2023. Assessing correlation between exhumation and geothermal anomaly development in the Western Canada Sedimentary Basin. International Conference on Thermochronology, Italy 3–10 September 2023.
- *Johns-Buss, E., Beranek, L., **Enkelmann, E.** 2023. Timing, rates, and spatial distribution of exhumation along the Newfoundland margin. International Conference on Thermochronology, Italy 3–10 September 2023.
- Jess, S., Schoenbohm, L. **Enkelmann, E.**, 2023. Sediment transport during glacier retreat: Apatite double dating and chemistry provenance. International Conference on Thermochronology, Italy 3–10 September 2023.
- *Härtel, B., Jonckheere, R., **Enkelmann, E.**, 2023. Spurious age-eU associations in thermochronological data. International Conference on Thermochronology, Italy 3–10 September 2023.
- *Härtel, B., Jonckheere, R., **Enkelmann, E.**, 2023. Testing the laboratory-based zircon Raman closure temperature: the Duluth FC1 zircon. International Conference on Thermochronology, Italy 3–10 September 2023.
- Enkelmann, E.**, Damant, K.A., Jess, S. 2023. New insights on the Cenozoic extension and fault reactivation in the southeastern Canadian Cordillera. Cordilleran Tectonic Workshop, Whitehorse, 3–5 March, 2023.
- *Padgett, J.A., **Enkelmann, E.**, Moynihan, D., Kellett, D.A., 2023. Cenozoic Exhumation in the Upper Hyland Valley, southeastern Yukon: New insights from low-temperature thermochronology. Cordilleran Tectonic Workshop, Whitehorse, 3–5 March, 2023.
- *Fontes Pinto, T., **Enkelmann, E.**, Terlaky, V. 2023. Initial assessment of detrital zircon (U-Th)/He thermochronology data from the southwestern Northwest Territories. Cordilleran Tectonic Workshop, Whitehorse, 3–5 March, 2023.

2022

- *Fontes Pinto, T., **Enkelmann, E.**, Terlaky, V. 2022. Low-temperature thermochronology of the Liard Basin and its thermal evolution: insights from zircon (U-Th)/He dating. Annual Yellowknife Geoscience Forum, 15–17. November, Yellowknife
- *Stephan, T. and **Enkelmann, E.**, 2022. What stresses the Canadian Cordillera? - A statistical analysis of the first-order intraplate stress field of western Canada. Canadian Tectonic Group Virtual Workshop, 1. October 2022.
- *Jess, S., **Enkelmann, E.**, Matthews, W., 2022. The effects of sediment transport in glaciated catchments on Multimineral detrital geochronology: deciphering contrasting zircon and apatite U-Pb dates. GSA Annual Meeting, Denver, CO 9–12 Oct. 2022. Geological Society of America, Abstracts with Programs, v. 54, no. 5.
- Enkelmann, E.**, Damant, K.A., Jess, S. 2022. New insights on the Cenozoic extension of the southeastern Canadian Cordillera. GSA Annual Meeting, Denver, CO 9–12 Oct. 2022. Geological Society of America, Abstracts with Programs, v. 54, no. 5.
- Enkelmann, E.**, 2022. New developments and challenges in low-temperature detrital thermochronology. The 11th International Conference on the analysis of Geological and Environmental Materials, Freiberg, Germany 6–12 Aug. 2022. Invited Keynote.
- *Jess, S., **Enkelmann, E.**, Matthews, W., 2022. Laser ablation (U-Th-Sm)/He dating: advancing detrital thermochronology and geochronology. GAC-MAC Annual Meeting, Halifax, 15–18 May, 2022.
- *Stephan, T. and **Enkelmann, E.** 2022. Statistical analysis of the first-order intraplate stress field of Alaska and the Canadian Cordillera, EON-ROSE Scientific Workshop Series, 25–28 April 2022, Nanaimo, BC, Canada

2021

- *Fontes Pinto, T., **Enkelmann, E.**, Terlaky, V. 2021. Thermal histories of Cambrian strata and basement rocks from the Great Slave Lake region, Northwest Territories. Annual Yellowknife Geoscience Forum, November, Yellowknife.
- Enkelmann, E.**, Fraser, K., Jess, S., Gilbert, H., 2021. Multi-phased late Cenozoic exhumation history along the central Rocky Mountain Trench. GAC-MAC Meeting, London, Ontario. 3–5 November, 2021.
- *Damant, K., **Enkelmann, E.**, Matthews, W., Fraser, K.I., 2021. Bedrock Exhumation Across the Columbia River Fault near Revelstoke, BC. GAC-MAC Meeting, London, Ontario. 3–5 November, 2021.
- *Jess, S., **Enkelmann, E.**, Grasby, S. and Fraser, K., 2021. Determining the longevity of hydrothermal systems using thermochronology and thermal modelling. GAC-MAC 2021, 3–5 November, London, ON.

Finzel, E., Enkelmann, E., Ridgway, K., Trop, J., McClelland 2021. Terranes, spreading ridges, and oceanic plateaus – a tale of the south-central Alaskan forearc. GSA Annual Meeting, Portland, Oregon 10–13 October, 2021

*Jess, S., **Enkelmann, E.**, Matthews, W., 2021. Laser ablation (U-Th-Sm)/He dating of detrital apatite in the Appalachians: a new analytical tool for resolving regional landscape evolution. GSA Annual Meeting, Portland, Oregon 10–13 October, 2021.

*Jess, S., **Enkelmann, E.**, Matthews, W., 2021. Laser ablation (U-Th-Sm)/He dating of detrital apatite from Appalachian river sediments. 17th International Conference on Thermochronology, 12–17 September 2021, Santa Fe, NM.

Flowers, R.M., Reiners, P., Danišik, M., Zeitler, P., Gautheron, C., Ketcham, R., Metcalf, J.R., Stockli, D., **Enkelmann, E.**, Brown, R., 2021. Reporting in (U-Th)/He chronology. 17th International Conference on Thermochronology, 12–17 September 2021, Santa Fe, NM.

2020

Jess, S., Koehn, D., Fox, M., **Enkelmann, E.**, Sachau, T., Aanyu, K., 2020. Thermal history modelling in extensional settings: the Rwenzori Mountains of the East African Rift. AGU Fall Meeting, San Francisco, USA, December. *Invited*

Enkelmann, E. 2020. Rock exhumation in the northern North American Cordillera. AGU Fall Meeting, San Francisco, USA, December. *Invited*

*Damant, K., **Enkelmann, E.**, Matthews, W., Fraser, K.I., 2020. Timing of Bedrock Exhumation Across the Columbia River Fault near Revelstoke, BC. AGU Fall Meeting, San Francisco, USA, December.

*Johns-Buss, E., Beranek, L.P., **Enkelmann, E.**, Jess, S., Matthews, W., 2020. Detrital zircon U-Pb and fission-track double-dating studies of Lower Cretaceous Hibernia Formation strata in the Jeanne d'Arc basin, offshore Newfoundland. GSA Annual Meeting, Montreal.

*Johns-Buss, E., Beranek, L.P., **Enkelmann, E.** 2020. Detrital zircon U-Pb and fission-track double-dating of Jurassic to Cretaceous reservoir sandstone units in the Jeanne d'Arc basin, offshore Newfoundland. Annual GeoConvention 11–13 May 2020.

Jess, S., **Enkelmann, E.**, Matthews, W. 2020. Multi-method dating of individual apatite and zircon grains: faster and cheaper analysis for detrital studies. Annual GeoConvention 11–13 May 2020.

*McKay, R., **Enkelmann, E.**, Matthews, W., Hadlari, T. 2020. Cenozoic exhumation history of the northern Richardson Mountains, Canada: Results from (U-Th-Sm)/He analysis. Annual GeoConvention 11–13 May 2020.

*Fraser, K.I., **Enkelmann, E.**, Matthews, W., Grieco, R., Damant, K. 2020. Exhumational history of the central Rocky Mountain Trench using low-temperature thermochronology. Annual GeoConvention 11–13 May 2020.

*Damant, K., **Enkelmann, E.**, Matthews, W., Fraser, K.I., 2020. Bedrock Exhumation Across the Columbia River Fault near Revelstoke, BC. Annual GeoConvention 11–13 May 2020.

*Choi, M., Eaton, D., **Enkelmann, E.** 2020. Is the eastern Denali Fault still active?: Tectonic implications of the 2017 earthquake doublet, northwestern Canada. Annual GeoConvention 11–13 May 2020.

Jess, S., **Enkelmann, E.**, Matthews, W. 2020. A new and innovative double-dating technique suitable for porphyritic systems. AME Roundup Annual Meeting, Vancouver 20–23 January, 2020.

2019

*Fraser, K., **Enkelmann, E.**, Matthews, W., Grieco, R., Damant, K. 2019. Low-temperature thermochronology of the central Rocky Mountain Trench. Tom Oliver Symposium 19. November 2019, University of Calgary.

*Damant, K., **Enkelmann, E.**, Matthews, W., Fraser, K., 2019. Rock exhumation across the Columbia River Fault near Revelstoke, BC. Tom Oliver Symposium 19. November 2019, University of Calgary.

*McKay, R., **Enkelmann, E.**, Matthews, W., Hadlari, T. 2019. Cenozoic exhumation history of the northern Richardson Mountains, Canada: Results from (U-Th-Sm)/He analysis. Tom Oliver Symposium 19. November 2019, University of Calgary.

Enkelmann, E., Bootes, N., Lease, Richard, Dunn, C.A., Ridgway, K., 2019. Sediment Source to Sink Record of a Glaciated Convergent Plate Margin: an Example from Southeast Alaska. AGU Fall Meeting, San Francisco, USA, 9-13 December.

Enkelmann, E. 2019. Deformation along the eastern margin of the Northern Canadian Cordillera. 47th Annual Yellowknife Geoscience Forum, 19–21 November, Yellowknife.

*Khodaparast, S., Madanipour, S., **Enkelmann, E.**, Nozaem, R., Hessami, K., Matthews, W. 2019. Low-temperature thermochronology constraints on Cenozoic fault kinematic inversion in Northern Iranian Plateau margin, case of the Kushk-e-Nosrat Fault, central Iran. The 3rd TRIGGER international conference, 8-10 October 2019, Zanjan, Iran

Enkelmann, E., 2019. Tectonics and Surface Process Interaction at the Yakutat-North American collision zone. GSA Penrose Conference, Climatic Controls on Continental Erosion and Sediment Transport: CLAST2019, Juneau, Alaska 4–10 August, *Invited*.

Choi, M., Eaton, D., **Enkelmann, E.** 2019. The May 1, 2017 St. Elias earthquake sequence: Tectonic implications and structural setting near the southern terminus of the eastern Denali Fault, northwestern Canada. 27th IUGG meeting, Montreal, July 8-18.

Enkelmann, E., 2019. Detrital zircon U-Pb and fission track double dating: investigating sediment provenance and the thermal history of source rock regions. GAC-MAC Quebec City, May 12-15.

Enkelmann, E., Finzel, F.S., Sanchez Lohff, S.K., 2019. Detrital zircon double-dating of forearc Cook Inlet basin strata reveals the thermal history of sediment source regions. GAC-MAC Quebec City, May 12-15.

Matthews, W., **Enkelmann, E.**, Pickering, J., 2019. Laser ablation U-Th-Sm/He dating of apatite. GAC-MAC Quebec City, May 12-15.

Enkelmann, E., Dunn, C.A., Bootes, N., 2019. Source to sink record of the Late Cenozoic Yakutat – North American collision. Cordilleran Tectonics Workshop, Vancouver, BC, February 22-24.

2018

Matthews, W., **Enkelmann, E.**, Pickering, J., 2018. Laser ablation U-Th-Sm/He dating of apatite and possible application to detrital studies. Annual Tom Oliver Poster Session – Geoscience Department, University of Calgary 29. November.

Enkelmann, E., Sanchez Lohff, S.K. Finzel, E.S., 2018. Detrital zircon double-dating of forearc basin strata reveals upper plate response to changing subduction modes. Annual Tom Oliver Poster Session – Geoscience Department, University of Calgary 29. November.

Enkelmann, E. 2018. Revealing rock exhumation pattern and temporal changes in glaciated mountains. 16th International Conference on Thermochronology. Quedlinburg, Germany, 16–21 September. *Invited Talk*

Matthews, W., **Enkelmann, E.**, Pickering, J. 2018. Laser ablation U-Th-Sm/He dating of apatite. 16th International Conference on Thermochronology. Quedlinburg, Germany, 16–21 September.

Enkelmann, E. & Finzel, E.S., 2018. Detrital zircon double-dating of forearc basin strata reveals upper plate response to changing subduction modes. Resources for Future Generations (RFG), GAC-MAC Annual Meeting, Vancouver, BC, June 16–21.

Enkelmann, E. 2018. Cenozoic deformation and rock exhumation at the Yakutat-North American collision zone. Cordilleran Tectonics Workshop, Whitehorse, Yukon, March 2-4.

2017

Enkelmann, E. 2017. Cenozoic deformation from the Yakutat–North American collision to the eastern margin of the Northern Canadian Cordillera. AGU Annual Fall Meeting, New Orleans, December, 2017. *Invited talk*

Finzel, E.S., **Enkelmann, E.**, Falkowski, S., Reid, M.R., McClelland, W.C. 2017. Forearc basin detrital record of Mesozoic-Cenozoic tectonics in the northern Cordillera, south-central Alaska. Annual GSA Meeting in Seattle, Oct. 22-25, 2017.

Enkelmann, E., Garver, J.I. 2017. SpeedDating!: Advice on Sampling and Applications for fission-track dating. Invited presentation to the Pardee Keynote Symposium P4. Speed Dating!: Advice on Sampling and Applications Through the Lens of the Geochronologist. Annual GSA Meeting in Seattle Oct. 22-25, 2017. *Invited*

Enkelmann, E., Dunn, C., Bootes, N., Lease, R., Ridgway, K.D. 2017. Source-to-sink record of erosion along a glaciated convergent margin. Annual GSA Meeting in Seattle, Oct. 22-25, 2017.

*Carsyn, A., Finzel, E.S., **Enkelmann, E.**, Thomson, S.N. 2017. Insights for provenance analysis from U/Pb geochronology applied to modern watersheds – Talkeetna Mountains, southcentral Alaska. Annual GSA Meeting in Seattle, Oct. 22-25, 2017.

*Schartman, A., **Enkelmann, E.**, Garver, J.I., Davidson, C. 2017. Temporal and spatial pattern of deformation at the northern end of the Fairweather transform boundary, Southeast Alaska. Annual GSA Meeting in Seattle, Oct. 22-25, 2017.

2016

*Sanchez-Lohff, S., **Enkelmann, E.**, Finzel, F., Reid, M., 2016. Upper Plate Response to Varying Subduction Styles in the Forearc Cook Inlet Basin in South Central Alaska. AGU Annual Fall Meeting, San Francisco, December 2016.

*Bootes, N., **Enkelmann, E.**, Lease, R., 2016. Offshore Sedimentary Record of Exhumation in Southeast Alaska Using Detrital Zircon Fission Track Analysis. AGU Annual Fall Meeting, San Francisco, December 2016.

Enkelmann, E., Dunn, C., Ridgway, K.D., Allen, W., 2016. Modern and Past Rock Exhumation in the St. Elias Mountains Revealed by Onshore and Offshore Detrital Thermochronology. AGU Annual Fall Meeting, San Francisco, December 2016.

Enkelmann, E., Falkowski, S., 2016. Cenozoic evolution of rock exhumation pattern at the Yakutat-North American collision zone. Geological Assoc. Canada – Mineralogical Assoc. Canada Annual Meeting, 1-3 June 2016, Whitehorse, Yukon, Canada.

Finzel, E.S., **Enkelmann, E.**, Falkowski, S., 2016. Long-term forearc basin evolution in response to changing subduction styles in southern Alaska, GSA Abstracts with Programs Vol. 48, No. 7. Abstract No: 279455. GSA Annual Meeting, 25 – 28 September, Denver, Colorado.

Gosney, L.C., Finzel, E.S., **Enkelmann, E.**, 2016. Investigating the correlation between watershed surface geology and detrital zircon age patterns in modern rivers. GSA Abstracts with Programs Vol. 48, No. 7. Abstract No: 279831. GSA Annual Meeting, 25 – 28 September, Denver, Colorado.

*Falkowski, S., **Enkelmann, E.**, Ehlers, T.A. 2016. Multi-method geo- and thermochronology of glacially transported cobbles reveals the tectonic and exhumation history of the St. Elias Mountains (Alaska/Yukon). European Geophysical Union, Annual

Meeting, 17-22 April, 2016, Vienna, Austria.

*Falkowski, S., **Enkelmann, E.**, Drost, K., Pfaender, J.A., Stuebner, K., Ehlers, T.A., 2016. Cenozoic evolution of the Yakutat-North American collision zone and structural accommodation of St. Elias syntaxis exhumation, Alaska/Yukon. European Geophysical Union, Annual Meeting, 17-22 April, 2016, Vienna, Austria.

Fillon, C., Ehlers, T.A., **Enkelmann, E.**, Becker, J.K., Schnellmann, M. 2016. Thermal and exhumation histories from borehole thermochronometer samples in the Swiss Molasse Basin. European Geophysical Union, Annual Meeting, 17-22 April, 2016, Vienna, Austria.

2015

*Dunn, C., **Enkelmann, E.**, Allen, W., Ridgway, K.D., 2015. Linking Quaternary Climate Changes to Mountain Building in Southeastern Alaska. AGU Annual Fall Meeting, San Francisco, December 2015.

Allen, W., **Enkelmann, E.**, Dunn, C., Ridgway, K.D., 2015. Provenance of marine sediment in the Gulf of Alaska, IODP Expedition 341: Links between sediment derivation, glacial systems and exhumation of the coastal Mountain belts. AGU Annual Fall Meeting, San Francisco, December 2015.

Ridgway, K.D., **Enkelmann, E.**, Allen, W., Dunn, C. 2015. Neogene Tectonics and climatic records in the marine sedimentary strata of the St. Elias Mountains and the Gulf of Alaska. AGU Annual Fall Meeting, San Francisco, December 2015.

Hedeon, T., Finzel, E., **Enkelmann, E.**, 2015. Provenance response to flat-slab subduction as recorded in detrital zircon signatures from the southern Alaskan forearc basin. GSA Abstracts with Programs Vol. 47, No. 7, # 263471. GSA Annual Meeting, Baltimore, 1–4 November, 2015.

Enkelmann, E., Koons, P.O., Pavlis, T., Barker, A., Hallet, B., Elliott, J., Garver, J.I., Pavlis, G., Ruppert, N., 2015. Cooperation among tectonic and surface processes in the St. Elias Range; Earth's highest coastal mountains. GSA Abstracts with Programs Vol. 47, No. 7, # 261213; GSA Annual Meeting, Baltimore, 1–4 November, 2015.

Arkle, J.C., Owen, L., Weber, J., **Enkelmann, E.**, 2015. Late Neogene-Recent Evolution of the Northern Range, Trinidad. Caribbean Geologic Conference; Trinidad-Tobago, May 2015.

Arkle, J.C., Moonan, X., Weber, J., **Enkelmann, E.**, Owen, L., Snoke, A., 2015. Plio-Pleistocene Sediment Source-to-Sink Thermochronology Study, North Coast Marine Area, Trinidad and Tobago. Caribbean Geologic Conference; Trinidad-Tobago, May 2015.

*Falkowski, S., **Enkelmann, E.**, Pfänder, J.A., Drost, K., Stübner, K., Ehlers, T.A., 2015. Spatial and temporal development of exhumation at the St. Elias syntaxis in the Yakutat-North American subduction-collision zone, SE Alaska. European Geophysical Union, Annual Meeting, Vienna, Austria.

*Piestrzeniewicz, A., **Enkelmann, E.**, Falkowski, S., 2015. Characterizing spatiotemporal variations in exhumation across the St. Elias syntaxis region using multi-method thermochronology. 111. GSA Cordillera Section Meeting, Anchorage, Alaska. May 11-13, 2015.

Enkelmann, E., Koons, P.O., Pavlis, T., Barker, A., Hallet, B., Elliott, J., Falkowski, S., Garver, J.I., Pavlis, G., Ruppert, N., 2015. Tectonic and surface processes produce Earth's highest coastal mountains. 111. GSA Cordillera Section Meeting, Anchorage, Alaska. May 11-13, 2015.

*Dunn, C., **Enkelmann, E.**, Ridgway, K., Allen, W., 2015. Does climate change affect exhumation? Identifying the link between tectonics, climate and offshore sediment deposition in southeastern Alaska. 111. GSA Cordillera Section Meeting, Anchorage, Alaska. May 11-13, 2015.

2014

Enkelmann, E., 2014. On the use of low-temperature thermochronology to study ancient exhumation processes. GSA-Northeastern Section Meeting, Lancaster, PA. GSA Abstracts with Programs Vol. 46, No. 2.

*Falkowski, S., **Enkelmann, E.**, Drost, K. 2014. On the provenance of Seward-Malaspina Glacier cobbles and the extent of rapid, deep exhumation at the Yakutat plate corner, SE Alaska. GSA-NE Section Meeting, Lancaster, PA.

Enkelmann, E. 2014. Neogene deformation at the corner of the Yakutat microplate in southeast Alaska. 5th International Conference of IGCP 588 and Fieldtrip Seismic and Nonseismic influences on Coastal Change in Alaska. May 3-10, southern Alaska.

Fillon, C., Ehlers, T.A., **Enkelmann, E.**, Becker, J.K., Schnellmann, M. 2014. Thermal and exhumation histories from borehole thermochronometer samples in the Swiss Molasse Basin. 14th International Conference on Thermochronology, Chamonix, France, 8–12 September, 2014.

*Arkle, J.C., Weber, J.C., **Enkelmann, E.**, Owen, L.A., 2014. Exhumation in the southeast Caribbean Plate corner. 14th International Conference on Thermochronology, Chamonix, France, 8–12 September, 2014.

Enkelmann, E., Ehlers, T.A., Falkowski, S., 2014. Using detrital thermochronology to quantify glacial catchment denudation and sediment mixing. 14th International Conference on Thermochronology, Chamonix, France.

*Falkowski, S., Pfänder, J., Drost, K., **Enkelmann, E.**, 2014. Cooling history and provenance of cobbles from the Seward-Malaspina Glacier, SE Alaska. 14th International Conference on Thermochronology, Chamonix, France.

*Piestrzeniewicz, P., **Enkelmann, E.**, Falkowski, S., 2014. Spatial and temporal constraints of rapid exhumation in the St. Elias syntaxis, southeast Alaska and southwest Yukon. 14th International Conference on Thermochronology, Chamonix, France.

Sonntag, B.-L., Min, M., **Enkelmann, E.**, Kornfeld, D., Ratschbacher, L., Pfänder, J., Jonckheere, R., Dunkl, I., 2014. Crustal flow along India's eastern margin, western Yunnan, China. 14th International Conference on Thermochronology, Chamonix, France.

2013

Roeske, S.M., Benowitz, J.A., **Enkelmann, E.**, Pavlis, T.P., 2013. Deformation record of 4-d accommodation of strain in the transition from transform to oblique convergent plate margin, southern Alaska. American Geophysical Union Fall Meeting, San Francisco.

*Falkowski, S., **Enkelmann, E.**, Ehlers, T.A., 2013. Spatial distribution of exhumation at the Yakutat plate corner and the role of glacial erosion, southeast Alaska/southwest Yukon. American Geophysical Union Fall Meeting, San Francisco.

Enkelmann, E., Ehlers, T.A., 2013. Evaluation of detrital apatite fission track thermochronology for quantification of glacial catchment denudation and sediment mixing. American Geophysical Union Fall Meeting, San Francisco.

Sonntag, B.-L., Min, M., **Enkelmann, E.**, Kornfeld, D., Ratschbacher, L., Jonckheere, R., Dunkl, I. 2013. Crustal flow around the Eastern Himalayan Syntaxis in western Yunnan, China. 28th Himalaya-Karakorum-Tibet Workshop and 6th International Symposium on Tibetan Plateau Joint Conference, Tübingen, Germany.

Enkelmann, E. 2013. Spatial and temporal variation in rock exhumation in the St. Elias Mountains: Insights from multiple thermochronometer techniques. DMV-GV Annual Joint Meeting, Tübingen, Germany (Invited)

*Falkowski, S., **Enkelmann, E.**, Ehlers, T.A., 2013. Rapid and deep-seated exhumation at the Yakutat plate corner, southeast Alaska/southwest Yukon Territory. DMV-GV Annual Joint Meeting, Tübingen, Germany.

2012

Enkelmann, E. and Ehlers, T.A., 2012. Advantages and challenges in automated apatite fission track counting. Geophysical Research Abstracts Vol. 14, EGU2012-3676, European Geophysical Union, Annual Meeting, Vienna, Austria.

*Falkowski, S., **Enkelmann, E.**, Ehlers, T.A., 2012. Exhumation at the northwestern Fairweather Range, southeast Alaska. Geophysical Research Abstracts Vol. 14, EGU2012-2906, European Geophysical Union, Annual Meeting, Vienna, Austria.

*Grabowski, D., **Enkelmann, E.**, Ehlers, T.A. 2012. Investigating the Seward – Malaspina Glacier detritus to quantify the spatial extent of intense rock exhumation in the St. Elias Range (SE Alaska). Geophysical Research Abstracts Vol. 14, EGU2012-2253-3, European Geophysical Union, Annual Meeting, Vienna, Austria.

Enkelmann, E., Ehlers, T.A., Falkowski, S., Grabowski, D. 2012. Spatial Variations in Deformation and Exhumation at the Yakutat plate corner, SE Alaska. AGU Fall Meeting, San Francisco, USA.

Ehlers, T.A., **Enkelmann, E.**, Yanites, B.J. 2012. Observational and Model Constraints on Glacial Erosion. AGU Fall Meeting, San Francisco, USA.

Pavlis, T., Gulick, S., Bruhn, R., Christeson, G., **Enkelmann, E.**, Freymueller, J., Hallet, B., Horton, Koons, P.O., Pavlis, G., Ridgway, K.D., Spotila, J., van Avendonk, H., 2012. Flat-slab subduction, orogenesis, intraplate deformation, and glacial erosion in southern Alaska: A tectonic-glacial progression from STEEP. AGU Fall Meeting, San Francisco, USA.

2011

Enkelmann, E., 2011. Combining long- and short-term observations to understand the spatial and temporal evolution of mountain belts. Geophysical Research Abstracts Vol. 13, EGU2011-5819, European Geophysical Union, Annual Meeting, Vienna, Austria.

Ridgway, K.D., Witmer, J., **Enkelmann, E.** Plafker, G. Brennan, P.R.K. 2011. Neogene sediment transport, deposition and exhumation from the southern Alaska syntaxis to the eastern Aleutian subduction zone. AGU Fall Meeting, San Francisco, USA.

Ridgway, K.D., Finzel, E.S. Trop, J. M., **Enkelmann, E.** Brennan, P.R.K., Witmer, J. 2011. Evaluating the role of Cenozoic flat-slab subduction processes on the regional tectonic, sedimentary basin, and climatic framework of southern Alaska. AGU Fall Meeting, San Francisco, USA.

2010

Enkelmann, E. and Ehlers, T.A., 2010. Large Temporal and Spatial Variations in the Eastern Himalayan Syntaxis Exhumation From Detrital Thermochronology Geophysical Research Abstracts Vol. 12, EGU2010-0, 2010, European Geophysical Union, Annual Meeting, Vienna, Austria. (invited)

Enkelmann, E. and Ehlers, T.A., 2010. Eocene to Recent Exhumation of the Eastern Himalayan Syntaxis Revealed by detrital Thermochronology. DMV-GV Annual Joint Meeting, Darmstadt, Germany.

2009

Enkelmann, E., Zeitler, P.K., Pavlis, T.L., Garver, J.I., Hooks, B.P. 2009. Overview of the exhumation pattern in southeast Alaska. GSA Annual Meeting, Portland, USA. (*invited*).

Headley, R. and **Enkelmann, E.,** 2009. Detrital thermochronology reveals efficiency of glacial erosion in the St. Elias Range, Alaska. GSA Annual Meeting, Portland, USA.

Hooks, B.P., **Enkelmann, E.,** Koons, P.O., Upton, P., 2009. 3D Thermomechanical modeling of the St. Elias Tectonic Aneurysm, GSA Annual Meeting, Portland, USA.

Witmer, J.W., Ridgway, K.D., **Enkelmann, E.,** Brennan, P., Valencia, V., 2009. Deposition, Provenance, and Exhumation of Neogene Strata in the Chugach – St. Elias Range, southeast Alaska. GSA Annual Meeting, Portland, USA.

Pavlis, T.L., Pavlis, G.L., **Enkelmann, E.,** Gulick, S.S.P., Koons, P., 2009. Tectonics of north America's greatest Mountain Range: Results of the St. Elias Erosion and Tectonics Project (STEEP) and its Importance to Wrangell – St. Elias, Kluane, and Glacier Bay National Parks. GSA Annual Meeting, Portland, USA.

2008

Enkelmann, E., Zeitler, P.K., Pavlis, T.L., Garver, J.I. 2008. Nascent Development of Focused Rock Uplift and Erosion in the St. Elias Orogen, Alaska. AGU Fall Meeting, San Francisco, USA. (*invited*)

Enkelmann, E., Garver, J.I., and Pavlis, T.L., 2008. Detrital thermochronology in the Chugach-St. Elias Orogen, SE Alaska. In: Garver, J.I., and Montario, M.J., (eds.) Proceedings from the 11th International Conference on thermochronometry, Anchorage Alaska, Sept. 2008, p. 68-70.

Zeitler, P.K., **Enkelmann, E.,** Idleman, B.D. 2008, ⁴He Solubility in Apatite is Low. International Conference on Thermochronology, Alaska.

Jonckheere, R.C., **Enkelmann, E.,** Stübner, K., Weise, C., Wauschkuhn, B., Ratschbacher L., 2008. The "other track" and its possible tie-ins with experiments and geological data. International Conference on Thermochronology, Alaska.

2007

Berger, A.J., Spotila, J.A., Chapman, J.B., Pavlis, T.L., **Enkelmann, E.,** Buscher, J.T. 2007. Erosional Reduction of an Orogenic Wedge: Structural Response to Neogene Climate Change within the St. Elias Orogen, Alaska. AGU Fall Meeting, San Francisco, USA.

Enkelmann, E., Garver, J.I., Pavlis, T.L., Bruhn, R.L., Chapman, J.B. 2007. Detrital zircon fission track analysis reveals the thermotectonic history of ice-covered rocks of the Chugach – St. Elias orogen, SE-Alaska. AGU Fall Meeting, San Francisco, USA.

Berger, A.J., Spotila, J.A., Chapman, J.B., Pavlis, T.L., **Enkelmann, E.,** Buscher, J.T. 2007. Architecture, Kinematics, and Exhumation of a Glaciated Orogenic Wedge: The Central St. Elias Orogen, Alaska. GSA Annual Meeting, Denver, Colorado.

Kidd, W.S.F., Lim, C., Zeitler, P.K., **Enkelmann, E.,** Booth, A.L., Chamberlain, C.P., Tang, W., Liu, Y., Craw, D., Structural and Tectonic Geology of the Namche Barwa-Gyala Peri Antiform, Southeastern Tibet. AGU Fall Meeting, San Francisco, USA.

Enkelmann, E., Weislogel, A., Ratschbacher, L., Eide, E., Renno, A., Wooden, J., 2007. The provenance record of detrital white mica and zircon grains from the Songpan–Ganzi Complex (China). GSA Annual Meeting, Philadelphia, USA.

2006

Min, M., Ratschbacher, L., **Enkelmann, E.,** Jonckheere, R., Tichomirowa, M., Bachmann, R., Nelson, B., Martens, U., McWilliams, M., Weber, B., 2006. Long-term evolution of continental transform fault zones: thermochronology along the northern Caribbean plate boundary (Guatemala-Honduras), European Conference on Thermochronology (ECTC) Bremen, Germany.

Enkelmann, E., Min, M., Jonckheere, R., Trautmann, C., Ratschbacher, L., 2006. Confined fission track measurements in ion-irradiated and step-etched prismatic apatite sections. European Conference on Thermochronology (ECTC), Bremen, Germany.

2005

Boztug, D, Jonckheere, R, **Enkelmann, E,** Ratschbacher, L., Wagner, G.A., 2005. Geodynamic implications of rapid denudation of the granitoids at about 50 and 20 Ma in the Eastern Pontides, Turkey: Apatite fission-track results. *Geochimica et Cosmochimica Acta* 69 (10), A300-A300 Suppl.

Enkelmann, E., Ratschbacher, L., Jonckheere, R., Gloaguen, R., 2005. Cenozoic denudation and deformation of eastern Tibet and the Qinling: Constraints from fission-track geochronology. Abstract GAC-MAC, Halifax, Canada.

Enkelmann, E., Ratschbacher, L., Gloaguen, R., Nestler, R., Fleischer, M., Jonckheere, R., Hacker, B. R., Zhang, Y. Q., 2005. Cenozoic denudation and deformation of eastern Tibet and the Qinling. Is Tibetan lower crustal flow diverging around the Sichuan basin? Abstract EGU General Assembly 2005, Wien, Austria.

2004

Enkelmann, E., Ratschbacher, L., Jonckheere, R., 2004. Cenozoic tectonics of the easternmost Tibetan plateau: Constraints from fission-track geochronology. AGU Fall Meeting, San Francisco, USA.

Enkelmann, E., Ratschbacher, L., Jonckheere, R., 2004. Cenozoic tectonics of the easternmost Tibetan plateau: Constraints from fission-track geochronology. Abstract 10. International Conference of Fission Track Dating and Thermochronology, Amsterdam, Netherlands.

Jonckheere, R., **Enkelmann, E., Ratschbacher, L., 2004.** A convoluted deconvolution of zeta: does it tell us what zeta is and what zeta-ages mean? Abstract 10. International Conference of Fission Track Dating and Thermochronology, Amsterdam, Netherlands.

Enkelmann, E., Jonckheere, R., 2004. Measurements of the uranium concentration and distribution in thick samples using external fission-track detectors: comparison of an absolute and standard-based approach. Abstract 10. International Conference of Fission Track Dating and Thermochronology, Amsterdam, Netherlands.

2003

Jonckheere, R., **Enkelmann, E., Stübner, K., 2003.** On the geometries of etched fission- and alpha-recoil tracks: Towards a model of track revelation in minerals? 2nd Latin American Symposium of Nuclear Tracks in Solid, Sao Pedro, Brasil. (*presented by Enkelmann*)

2002

Enkelmann, E., Jonckheere, R., Ratschbacher, L. 2002. Sources of systematic error in fission-track dating: theoretical and experimental determination. 21. International Conference of Nuclear Tracks in Solid, New Delhi, India.

Enkelmann, E., Jonckheere, R., Wagner, G. A., Ratschbacher, L., Schmid, J., 2001. Late-stage exhumation of the Dabie Shan orogenic belt and its foreland: apatite fission-track constraints. Abstracts ICDP/KTB Colloquium, Bochum, Germany.

Jonckheere, R., **Enkelmann, E., Ratschbacher, L., Schmid, J.C., Liu, S., Wu, Q., Wagner, G.A., 2001.** Fission-track analysis of the post orogenic tectonic history of the Qinling-Dabie-Sulu orogen (East-central-China). Abstracts ICDP/KTB Colloquium, Bochum, Germany.

INVITED PRESENTATIONS (n=57)

Oct 2023	Eberhard Karls University Tübingen, Geo und Umweltzentrum. "Terrane Accretion and Far-Field Deformation in the Canadian Cordillera" Germany, in person.
Mar 2023	University of British Columbia, Department of Earth, Oceans and Atmospheric Science, Seminar "Using Low-Temperature Thermochronology to study rock exhumation". Vancouver, BC, in person.
Mar 2023	TRIUMF Canada's particle accelerator center. Seminar "Fission-Track Dating Enhancements with ISAC Stable Beams" Vancouver, BC, in person.
Aug 2022	Keynote Lecture: "New developments and challenges in low-temperature detrital thermochronology" at the International Conference of Geoanalysis, 7–12 August, 2022, Germany.
Apr 2022	Seminar talk for Tectonophysics Group, "Cenozoic Deformation in the Southeastern Canadian Cordillera" TU Bergakademie Freiberg, Germany, in person
Feb 2022	Canadian Society of Petroleum Geoscientist– Structural Division seminar: "New insights in the late Cenozoic exhumation history of the southeastern Canadian Cordillera", virtual
Nov 2021	Seminar talk for Adjunct Professor application: "Low-Temperature Thermochronology: Methods and Applications" at Memorial University, virtual
Apr 2021	Departmental Seminar "STEEP project synthesis presentation" with T. Pavlis, G. Pavlis, K. Ridgway & E. Enkelmann, at University of Wisconsin, virtual
Apr 2021	Alaska EarthScope and Beyond Seminar "STEEP project synthesis presentation" with T. Pavlis, G. Pavlis, K. Ridgway & E. Enkelmann, virtual
Oct 2020	Department Seminar: "Building Canada's highest peaks: Tectonics and Climate Interaction in the Yakutat – North American collision zone" at Trinity University, Dublin, Ireland, virtual
Jun 2020	US & Canada collaboration on Northern Cordillera Research: "Overview of exhumation studies in the Northern Cordillera" Online workshop 2.–3. June 2020, virtual

All presentations were in person prior to March 2020.

- Feb 2020 Texas A&M University, Department Seminar: “Building Canada’s highest peaks: Tectonics and Climate Interaction in the Yakutat – North American collision zone”
- Aug 2019 GSA Penrose Conference, CLAST2019 „Tectonics and Surface Process Interaction at the Yakutat-North American collision zone“, Juneau, Alaska 4–10 August,
- Nov 2018 Dalhousie University, Invited presentation on “Career paths” to the Association of Women Geoscientists (AWG) chapter Dalhousie
- Nov 2018 Dalhousie University, Department Seminar: “Building Canada’s highest peaks: Tectonics and Climate Interaction in the St. Elias Mountains”
- Sep 2018 “Revealing rock exhumation pattern and temporal changes in glaciated mountains“ 16th International Conference on Thermochronology. Germany, 16–21 Sep
- Apr 2018 TU Bergakademie Freiberg, Seminar, “Upper plate response to varying subduction styles recorded in the forearc Cook Inlet Basin, south central Alaska”, Germany
- Dec 2017 American Geophysical Union “Cenozoic deformation from the Yakutat–North American collision to the eastern margin of the Northern Canadian Cordillera”, Annual Fall Meeting, New Orleans
- Nov 2017 McConnell Club talk (NRCan Geological Survey Canada) “Building Canada’s highest Mountains: Yakutat – North American collision”
- Oct 2017 Pardee Keynote Symposium P4. Speed Dating!: Advice on Sampling and Applications Through the Lens of the Geochronologist. “SpeedDating!: Fission-track dating”. Invited presentation to the Annual GSA Meeting, Seattle.
- Aug 2017 Research talk “Spatial pattern of Cenozoic exhumation at the western margin of the Northern Canadian Cordillera”, CCArray workshop, Victoria, B.C.
- Jul 2017 TU Bergakademie Freiberg, Seminar “Source to sink record of exhumation in the St. Elias orogen”, Germany
- Apr 2017 Martin Luther Universitaet Halle, Research talk “Tectonic – Climate Interaction at the Yakutat–North American Collision zone“, Germany
- Feb 2017 University of Calgary, Research talk, “Building Canada's highest Mountains: Yakutat - North American collision”
- Nov 2016 Syracuse University, Colloquium talk, “Exhumation processes at the Yakutat – North American collision zone (southeast Alaska)”
- Jul 2016 TU Bergakademie Freiberg, Seminar “Exhumation in the St. Elias Mountains”, Germany
- Feb 2016 University of Frankfurt, Research talk, “Investigating the interplay between Tectonics and Atmospheric Processes”, Germany
- Feb 2016 Faculty Club of the University of Cincinnati “Building the Earth’s highest coastal mountain range – the St. Elias Mountains in Southeast Alaska”, USA
- Nov 2015 University of Wisconsin, Milwaukee, Colloquium talk, “Tectonics and Surface Process Interaction at the Yakutat Plate Corner, SE Alaska”, USA
- Nov 2015 Miami University, colloquium talk, “Tectonics and Surface Process Interaction at the Yakutat Plate Corner, SE Alaska”, USA
- Oct 2015 Appalachian State University, Colloquium talk, “Tectonics and Surface Process Interaction in Southeast Alaska“, USA
- Sep 2015 Purdue University, Workshop (1 day) “Thermochronology Methods and Applications“, USA
- Jul 2015 University of Manchester, Colloquium talk “Detrital Thermochronology in Glaciated Regions“, UK

Feb 2015 University of Iowa, Colloquium talk “Tectonics and Surface Process Interaction at the Yakutat Plate Corner”, USA

May 2014 IGCP-588 conference and fieldtrip in Alaska, Field guide “The Geology and surface processes in the St. Elias Mountains“, USA

Nov 2013 University of Indiana, Colloquium talk “Tectonics and Surface Process Interaction at the Yakutat Plate Corner, SE Alaska“, USA

Nov 2013 West Virginia University, Colloquium talk “Mountain Building and Erosion in the St. Elias Mountains (southeast Alaska)“, USA

Oct 2013 Ball State University, Colloquium talk “Tectonics and Surface Process Interaction at the Yakutat Plate Corner“, USA

Sep 2013 Plenary Lecture, “Spatial and temporal variation in rock exhumation in the St. Elias Mountains: Insights from multiple thermochronometer techniques“ GV-DMG annual meeting, Tuebingen, Germany

Dec 2012 Invited Talk “Spatial Variations in Deformation and Exhumation at the Yakutat Plate corner“ AGU Fall meeting, San Francisco, USA

Mar 2012 University of Cincinnati, Research Talk “Using thermochronology to study rock exhumation processes in the St. Elias Range, Alaska“, USA

Feb 2011 University of Alaska, Fairbanks, Chapman Lecture Series, “Tectonic and surface process interaction at the Yakutat – North American collision zone in southeast Alaska“, USA

Feb 2011 University of Alaska, Fairbanks, Chapman Lecture Series, “Using thermochronology to study temporal and spatial variations of rock exhumation“, USA

Feb 2011 University of Alaska, Fairbanks, Geology Department Seminar, “Tectonics and surface process interaction in the St. Elias Range“, USA

Oct 2009 GSA annual meeting, Portland, USA

Feb 2009 University of Maine, Seminar talk, USA

Jan 2009 University of Washington, Seattle, Earth and Space Science Dept. Seminar, USA

Jan 2009 Purdue University, Earth Science Dept. Seminar, USA

Dec 2008 AGU Fall meeting, San Francisco

Nov 2008 University of Tübingen Interview talk W3 Professorship in Geology and Tectonic.

Sep 2007 International workshop on “Low-temperature thermochronology and its application: world-wide transfer of knowledge and inter-laboratory calibration“, Pisa, Italy.

Sep 2007 International Summer School “Isotope Geochemistry and Geochronology of Tectonic Processes“, invited talk, Marmaris, Turkey.

Feb 2007 Lehigh University, Earth and Environmental Science Dept. Seminar talk, USA

Feb 2005 Geological Society of Myanmar, Rangoon, Myanmar

Feb 2005 Graduate School of Geoscience, University of Mandalay, Myanmar

Oct 2003 Ion-Accelerator-Facility, user committee meeting, Hahn-Meitner Institute Berlin, Germany

TEACHING & SUPERVISION

I have taught undergraduate and graduate courses at four different universities (Lehigh University, University of Tübingen, University of Cincinnati, and University of Calgary) and in three different countries (USA, Germany, and Canada). Since 2015, I teach my courses in a flipped classroom design where I integrate active learning strategies during lectures and labs. More information is available in my Teaching Dossier. Since my graduate studies and building my first thermochronology lab in 2020, I have trained and supervised countless students and researchers conducting laboratory analyses, data processing and helping them with the interpretation for their research projects.

TEACHING EXPERIENCE

<i>University of Calgary, Canada</i>	Term
GLGY 555 Global Tectonics, upper-level undergraduate	Fall 2022, 2024
GLGY 445 Structural Geology; undergraduate core course	Winter 2018–2024
GLGY 435 Advanced Field Methods (12-day field school)	Spring 2023, 2023
GLGY 699.61 Radiometric Dating; graduate course	Winter 2019
GLGY 707 Geology & Geophysics of Western Canada; graduate course, including 3-day fieldtrip	Fall 2023, 2021, 2019, 2018
GLGY 615 Advanced Laboratory Methods; graduate course, co-teaching with R. Nair and C. Antao	Fall 2018–2021
<i>University of Cincinnati, USA</i>	
GEOL 2009 Structural Geology; undergraduate core course; including 3-day field trip to Southern Appalachians	Spring 2013–2017
GEOL 1099 Foundation of the Geoscience; including several fieldtrips	Spring 2016, 2017
GEOL 6042 Tectonics & Regional Geology, upper-level undergraduate + graduate students	Fall 2016
GEOL 1022 Geology in your Shopping Cart; undergraduate non-major	Spring 2015
GEOL 6043 Thermochronometric Methods; upper-level undergraduate + graduate students; including a 3-day fieldtrip	Fall 2014, 2015
<i>University of Tübingen, Germany</i>	
Geodynamics II: Regional Geology; undergraduate course	Winter 2010, 2011
Geodynamics of Endogen & Exogen Processes; graduate course	Winter 2010, 2011
Field Camp and mapping in Elba, Italy (3 weeks)	Winter 2010, 2011
Maps & Profile, undergraduate core course	Summer 2010
<i>Lehigh University, USA</i>	
EE 027 Natural Disasters; undergraduate non-major course	Fall 2008

RESEARCH SUPERVISION

Post-Doctoral Fellows (n=4)

Akeek Maitra, PhD	2023 – ongoing
Birk Haertel, PhD	2022 – ongoing
Tobias Stephan, PhD	2020–2022
Scott Jess, PhD	2019–2021

Graduate Students (n=23)

Muhammad Rafeeza, MSc	2024–	<i>Laser based (U-Th)/He and U-Pb analyses on detrital apatite from the Alberta foreland</i>
Baiansuluu Terbishalieva, PhD	2023–	<i>Investigating the Mesozoic and Cenozoic thermal history of the Intermontane Belt</i>
Emily Johns-Buss, PhD	2022– (co-superv.)	<i>Timing and rates of Mesozoic rift-related exhumation in the Newfoundland and west Iberian (Portugal) magma-poor rift margins using low-temperature thermochronometry</i>
Joel Padgett, PhD	2021–	<i>Cretaceous-to-Present Uplift and Exhumation in the Northern Canadian Cordillera</i>
Tais Fontes Pinto, PhD	2021–	<i>Phanerozoic thermal history of northern Western Canada Sedimentary Basin</i> Lead author reports #1
	graduated	
Kade Damant, MSc	2022	<i>Prolonged Post-Orogenic Extension in the Southeastern Canadian Cordillera: Miocene Reactivation of the Columbia River Fault</i> Lead author # 9
Cecilia D’Mello, PhD	withdrew	
Emily Johns-Buss, MSc	2021 (co-superv.)	<i>Detrital Zircon double dating Jeanne D’Arc Basin, Newfoundland</i> Lead author # 11
Sedighe Khodaparast, PhD	2020 (co-superv.)	<i>Spatial and temporal evolution of the Kushk-e-Nosrat strike slip fault zone in western Central Iran.</i> Lead author # 3, 23
Kelley Fraser, MSc	2020	<i>Exhumation history of the central Rocky Mountain Trench using low-temperature thermochronology</i> Lead author # 17
Ryan McKay, MSc	2020	<i>Cenozoic exhumation history of the northern Richardson Mountains: Results from apatite and zircon (U-Th-Sm)/He analysis</i> Lead author # 21
Minhee Choi, MSc	2019 (co-superv.)	<i>Source Parameters and Tectonic Setting of the May 1, 2017 St. Elias Earthquake Sequence near the Southern Terminus of the Eastern Denali Fault, Northwestern Canada</i>

		Lead author # 22
Julia Pickering, MSc	2018 (co-superv.)	<i>A measurement method for U-Th-Sm/He dating of apatite by laser ablation</i> Lead author # 25
Jeannet Arkle, PhD	2019 (co-superv.)	<i>Orogenesis and landscape evolution above the subduction-transform transition at the southeast Caribbean plate corner, Trinidad & Tobago</i> Lead author # 18
Nathaniel Bootes, MSc	2018	<i>Late Cenozoic Offshore Record of Exhumation and Sediment Routing in Southeast Alaska from Detrital Zircon U/Pb and FT double-dating</i> Lead author # 27
Sonia Sanchez-Lohff, MSc	2018	<i>Upper plate response to varying subduction styles in the forearc Cook Inlet basin, south-central Alaska</i> 2 nd author # 29
Sarah Falkowski, PhD	2016	<i>Cenozoic evolution of the Yakutat–North American collision zone, southeast Alaska</i> Lead author # 44, 45, 56
Catherine Dunn, MSc	2016	<i>The offshore sedimentary record of rock exhumation in the St. Elias Mountains, Alaska</i> Lead author # 37
Adam Piestrzezewicz, MSc	2015	<i>Characterizing variations in exhumation at the Yakutat–North America collision zone using multi-method thermochronology</i> 2 nd author # 39
Saeed Madanipour, PhD	2015 (co-superv.)	<i>Tectonic evolution of the northern Iranian Plateau – Arabia-Eurasia collision zone</i> Lead author # 32, 33, 60
David Grabowski, MSc	2012	<i>Evaluation of the spatial extend of rapid exhumation in the St. Elias syntaxis region, SE Alaska</i> Lead author # 61
Gabriel Merli, MSc	2011 (co-superv.)	<i>Exhumation history of the middle Eocene Chumstick Basin, Washington State, USA</i> 3 rd author # 51
Annika Szameitat, MSc	2010 (co-superv.)	<i>Spatial variation of glacial erosion evaluated from detrital thermochronology</i> 2 nd author # 50

Undergraduate Thesis & Summer Research (n=23)

University of Calgary, Canada

Tegan Potvin	
Aaron Rowsell	NSERC USRA summer 2024
Ashley Whelan	NSERC USRA summer 2023
Scott Tiede	NSERC USRA summer 2022
Alyson MacDougall	
Andreas Abersold	
Molly Csak	PURE summer 2020
Kade Damant	PURE summer 2019
Ryan Grieco	NSERC USRA summer 2018, co-author # 17

Chujing Zhang

University of Cincinnati, USA

Anna Schartman (Lead author # 29), Shawn McAleer, Shannon Neale, Victoria Thomas, Emily Chigolle, Bridget Taylor, Geoffrey Jackson

University of Tübingen, Germany

Matthias Loose, Christof Balles, Kilian Mueller, Gerald Buck (Co-author #67), Philipp Widmann

Graduate Student Awards & Recognitions under my supervision (UofC only)

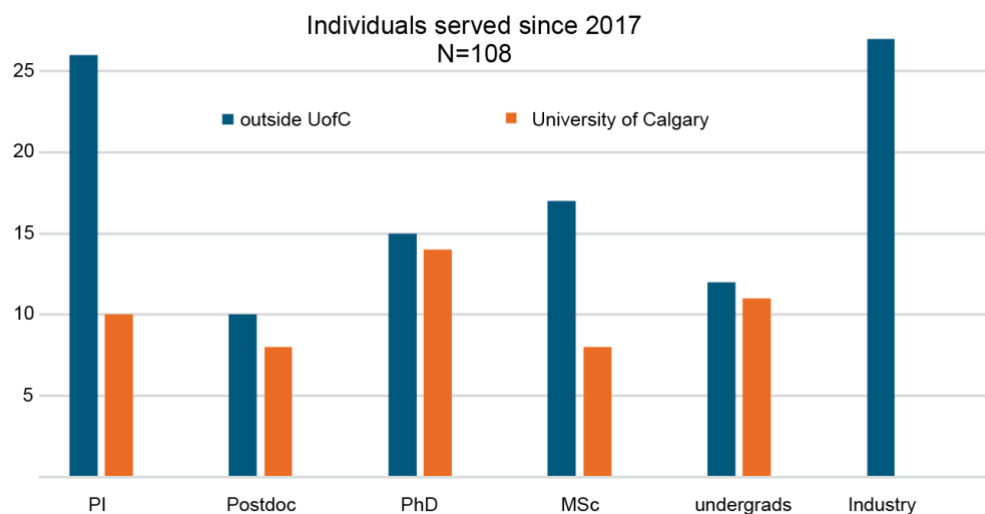
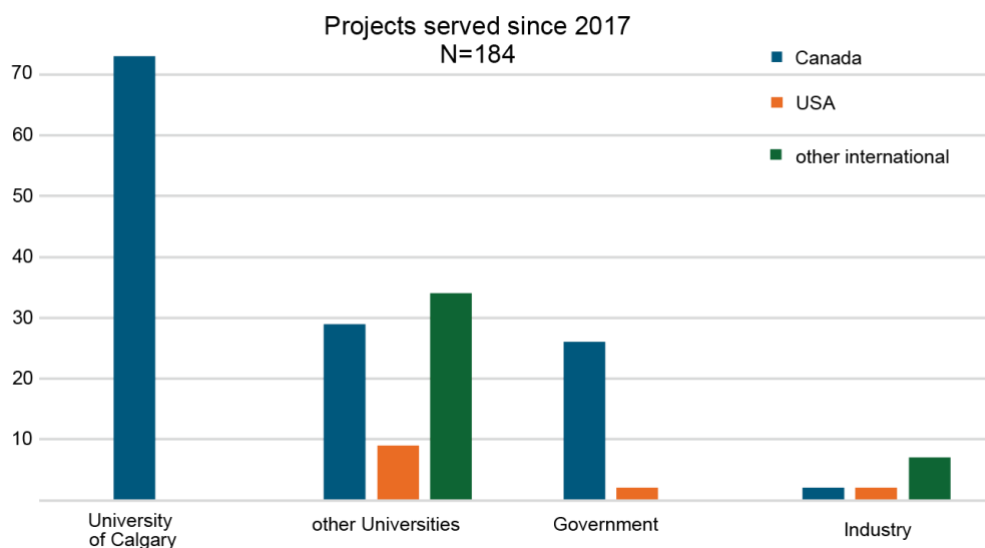
B. Terbishalieva	2 nd place best poster presentation at the CTW 2024
T. Fontes Pinto	Geoscience BC Graduate Scholarship (2024) Danielle Kondla Memorial Graduate Scholarship (2024) Alberta Graduate Excellence Scholarship (2022) Dr. Alfred A. Levinson Memorial Graduate Scholarship (2022)
J. Padgett	Dr. Alfred A. Levinson Memorial Graduate Scholarship (2024) Faculty of Graduate Studies Doctoral Scholarship (2024) 1 st place best poster presentation at the CTW 2024 Geoff Bradshaw Graduate Award (2023) 2 nd place best poster pitch at Thermo2023 Grant Mossop Graduate Scholarship in Geology (2022) Alberta Graduate Excellence Scholarship (2021, 2022)
Kade Damant	2023 Best MSc Thesis award by the Canadian Tectonics Group NSERC Master Graduate Scholarship (2020) Geoscience BC Graduate Scholarship (2021)
K. Fraser	Alberta Graduate Excellence Scholarship (2019)
R. McKay	2021 Best MSc Thesis award by the Canadian Tectonics Group

Graduate Student Supervisory Committee (ongoing only)

Doug MacLeod, PhD	University of Calgary	2020 – ongoing
Collin Kehler, PhD	University of Calgary	2022 – ongoing
Shay Ridl, PhD	University of Iowa	2022 – ongoing
Paola Alvarez Zapata, MSc	University of British Columbia	2024 – ongoing
Abigail Boyd	University of Oklahoma	2024 – ongoing

Providing service, advise and supervision to others

As the head of the Geo-and Thermochemistry Laboratory at UofC we provide services for others, and I strive to facilitate research projects of other academic and governmental PI at institutions worldwide. Most of the 184 projects conducted since 2017 involve my advising on analytical strategies and sampling prior to the lab analysis, student and postdoc advising during the analyses, and communicating and advising after the analyses are delivered.



SERVICE

I aim to serve the various communities that I am part of. That includes the students and my colleagues at UofC, the international and national scientific community, the governance of the various academic institutions I worked for, and the public in my local community. I aim to find the time to continue my professional development to enhance my technical and non-technical skills and effectiveness in conducting my work as a researcher, teacher, and colleague.

PROFESSIONAL & SCHOLASTIC SERVICE

- Member of the *International Standing Committee on Thermochronology* (2023–2031)
- Associate Editor of *Tectonics* (AGU Journal) 2017–ongoing
- Editorial Board Member of *Lithosphere* (GSA Journal) 2015–2017

- Guest Editor: 2011–2013 Special Volume in *Geosphere*: “Neogene tectonics and climate-tectonic interactions in the southern Alaskan orogen” edited by T. Pavlis, E. Enkelmann, S. Gulick, G. Pavlis.
- Adjudication for the *Canadian Tectonics Group* – David Elliott award for best paper in Tectonics (2022)
- Adjudication for the *Canadian Tectonics Group* – Best PhD Thesis (2022)
- External Reviewer for hiring, tenure and promotion: University of Bremen, Freie University Berlin, Queens University, University of Idaho, Texas A&M

Reviewer and panelist for funding agencies

- US National Science Foundation (NSF): programs of *Tectonics* (panelist), *Geomorphology*, *GeoPRISM*, and *EarthScope*
- American Chemical Society – Petroleum Research Fund: program of *Early Career* and *New Directions*
- German Research Foundation (DFG): programs *General Earth Sciences*, *SPP* (panelist)
- Canadian National Science and Engineering Research Council (NSERC): programs of *Discovery Grants* and *Alliance Grants*
- National Geographics: *Explorer grants*
- Alexander von Humboldt Foundation: *Postdoctoral Scholarships*
- The Leverhulme Trust: *Research Grants*
- Czech Research Foundation: *Research Grants*

Reviewer for journals

Tectonics, Geology, Tectonophysics, Basin Research, EPSL, GSA Bulletin, Int. J. Earth Sciences., Lithosphere, Geomorphology, Geosphere, Chemical Geology, G-cube, Journal Quaternary Science Reviews, Terra Nova, Science, Nature Geoscience, Economic Geology

Memberships

Geological Society of America (GSA), Fellow since 2022
 American Geophysical Union (AGU)/European Geophysical Union (EGU)
 Geological Association of Canada (GAC)
 International Association of Geoanalysts (IAG)

Conferences

- Lead Organizer of the 20th *International Conference on Thermochronology*, Banff, Sep 2027 (expected ca. 200-250 international participants)
- Lead Organizer and Host of the annual *Cordilleran Tectonics Workshop* (1-3 March 2024) held at University of Calgary (68 international participants)
- Scientific Committee of the 18th *International Conference on Thermochronology*, Riva del Garda, Italy 3–9. Sep 2023
- Scientific Committee of the 17th *International Conference on Thermochronology*, Santa Fe, USA, Sep 2021
- Session convener at the *GeoConvention 2020* (Calgary), title: *Lithospheric deformation: from terrane accretion to continental collision*. By Eva Enkelmann, Hersh Gilbert, William Matthews, Lydia DiCaprio.

- Session convener *GAC-MAC Annual Meeting 2019* (Quebec City), title: *Quantifying Timing and Rates of Geologic Processes* by Eva Enkelmann and William Matthews.
- Session convener *GSA-Cordilleran Section Annual Meeting 2015* (Anchorage), title: *Tectonic-surface process interactions during terrane accretion and mountain building along the Cordillera*; by Richard Lease and Eva Enkelmann
- Session convener *GSA-NE Section Annual Meeting 2014* (Lancaster), title: *Echoes of Exhumation: Comparing Exhumation Processes of the Ancient Appalachians to Those of Currently Active Orogens*; by Craig Dietsch and Eva Enkelmann
- Session convener *AGU Fall Meeting 2013* (San Francisco) title: *Glacier Processes on the Scales of Mountains and Orogens*; by Rachel Headley and Eva Enkelmann

Organizing and teaching of short courses

- *GAC-MAC Annual Meeting 2021* (London, ON): 1-day short course: *Rates and Dates: Dating methods and applications* by Eva Enkelmann and William Matthews
- *GAC-MAC Annual Meeting 2021* (London, ON): 1-day short course: *Quantifying sediment provenance and basin thermal histories* by Eva Enkelmann and William Matthews
- *GeoConvention Annual Meeting 2020* (Calgary): 1-day short course: *Rates and Dates: Dating methods and applications* by Eva Enkelmann and William Matthews
- *GeoConvention Annual Meeting 2020* (Calgary): 1-day short course: *Quantifying sediment provenance and basin thermal histories* by Eva Enkelmann and William Matthews
- *GAC-MAC Annual Meeting 2019* (Quebec City) Short Course Title: *Rates and Dates: Geo- and Thermochronology methods and applications* by Eva Enkelmann and William Matthews.
- *University of Alaska, Anchorage, August 2015* 1-day short course: *Detrital Applications of Geochronology and Thermochronology* by Eva Enkelmann and Emily Finzel

SERVICES TO THE UNIVERSITY, FACULTY & DEPARTMENT (since employment at UofC)

- Elected Representative of the Department of Earth, Energy, and Environment in the Science Faculty Assessment Committee of the University of Calgary (2023)
- Hiring committee for the Transdisciplinary hire on “Critical Minerals” between the Earth, Energy, and Environmental Department and the School of Public Policy (Nov 2023–May 2024)
- Search Committee of Chemistry Department Head (Fall 2023)
- University open house Faculty of Science volunteer 2022
- Faculty of Science, peer-review for NSERC-DG 2024
- Department of EEE Space & Infrastructure Committee (2023– ongoing), chair since 2024
- Department of EEE Research & Innovation Committee (2020– ongoing)
- Department of Geoscience New Curriculum Committee (2021–2023)
- University of Calgary, Faculty of Graduate Studies; Geoscience members of the FGS Scholarship Adjudication Committee 2018–2019 and 2019–2020
- Faculty of Science International Committee (2021–2023)
- Department of Geoscience Safety Committee (2018–2020)

SCIENCE OUTREACH & COMMUNICATION (since employment at UofC)

- *Earth Science for Society* volunteer at Department booth 2018, 2022, 2023, 2024
- Initiator, co-organizer, and volunteer of Earth Themed weekend at *TELUS Spark Science Center* in Calgary (4–5 Nov, 2023) – this event attracted >2500 people and is planned to run again
- Radio CBC interviews 2023 to promote Earth Themed weekend (Nov 2023) and new geoscience book (April 2023)

Presentations about Alberta’s Earth History

- *Telus Spark*, 2 presentations, 4–5 Nov. 2023 (ca. 150 people, mostly families)
- *Calgary Rock and Lapidary Club*, Nov. 2023 (ca. 35 people, mostly age 40+)
- *Kamloops Exploration Group*, Jan, 2024 (33 people, adults)
- *Bow River Basin Council Quaternary Education and Networking Forum*, March, 2024 (ca. 40 people, professionals)
- *Earth Science for Society*, 2 presentations, March 2024 (ca. 150 people, mostly families)
- *Friends of Fish Creek Provincial Park* Speaker series, March 2024 (40 people, mostly age 40+)
- *Interpretive Guide Association of Canada* – Professional development session, June 2023 and Feb 2024 (55 people, certified guides)
- *Banff Via Ferrata at Mount Norquay* – Half-day training in the field, June 2024 (24 people, certified guides)
- *Ghost Watershed Alliance Society* – Full day geology guide, June 2024 (18 people, age 10–70)

TRAINING & PROFESSIONAL DEVELOPMENT (since employment at UofC)

TITLE	DATE	MOTIVATION	HOURS
INTERNAL (University of Calgary)			
<i>Leadership, Teaching & Communication skills</i>			
Equitable & Inclusive Hiring for Acad. Select.	11/2023	Preparation for committee service	1
FoS EDI coffee chats	03/2022	Enhancing EDI in department	1
Building EDI plan for Tri-council	02/2022	Improving grant writing skills	2
Harassment & Violence Awareness Training	12/2020	General professional development	1
TI 0878 Using YuJa in Teaching and Learning	05/2020	Improving online teaching skills	2
Science Teaching Forum in Flipped classes	10/2019	Advancing teaching skills	1
Department Teaching Reading group	Fall 2019	Advancing teaching skills	4
Teaching Dossier Development	07/2019	Preparation for tenure application	2
Tenure and Promotion workshop, FofS	07/2019	Preparation for tenure application	2
Giving feedback	07/2019	Improving teaching and advising	2
Contracting with Industry	06/2019	Research development	1
Making sense of student feedback	05/2019	Improving teaching development	3
Taking advantage of MBTI for teaching and learning	01/2019	Improving teaching and advising	1
Unconscious bias	01/2019	Improving teaching and advising	2
Workplace Inspections Training	03/2018	Preparation for committee service	2
Personal Effectiveness Program	Fall 2018	General professional development	15
Graduate scholarship committee training	10/2018	Preparation for committee service	2
Everything you need to know about Canadian politics	02/2019	Understand Canadian community	6
GLGY707 Geology & Geophysics of western Canada	Fall 2017	Getting to know local geology and teaching style in the department	20

<i>Safety training for running my research laboratory</i>			
Radioactive Material Safety Training	04/2024	UofC requirement	10
Incident Reporting and Investigation Training	04/2023	UofC requirement	1
Laser Safety Training	08/2023	UofC requirement	3
Laboratory Safety Training	10/2017	UofC requirement	5
Ladder Safety Training	09/2017	UofC requirement	1
Spill Response Training	09/2017	UofC requirement	1
WHMIS 2015	09/2017	UofC requirement	2
Occupational Health and Safety Orientation	09/2017	UofC requirement	2
Hazard Assessment Training	09/2017	UofC requirement	1
<i>Safety skills for fieldwork and teaching in the field</i>			
Glacier Travel Course	07/2024	Enhancing safety skills for fieldwork	16
First Aid and CPR	05/2024	UofC requirement for fieldschool	16
Defensive Driving	04/2024	UofC requirement for fieldschool	4
Field Safety Course	12/2022	UofC requirement for fieldschool	5
Swiftwater Rescue course	07/2018	Enhancing safety skills for fieldwork	8
Remote Responder, 24 hr wilderness first aid	05/2018	Enhancing safety skills for fieldwork	24
Wildlife awareness	05/2018	Enhancing safety skills for fieldwork	6
Firearm awareness training	05/2018	Enhancing safety skills for fieldwork	8
Helicopter Awareness training	06/2018	Enhancing safety skills for fieldwork	8
Avalanche skill level 1	11/2017	Enhancing safety skills for fieldwork	15
<i>Technical skills</i>			
ART 320 Graphic Design	W 2023	Improving presentation skills	30
Introduction to R & applic. to Geochronology	02/2022	General professional development	10
WRI 330 Publishing and Promoting your work	F 2021	General professional development	40
WRI 205 Correct and Clear! Grammar, Punctuation and Style	W 2019	Improving writing skills and ability to provide constructive feedback	16
EXTERNAL AGENCIES			
Implicit Bias in the Publication Process	12/2022	Required for all AGU editors	2
Indigenous Canada (Univ. of Alberta)	S 2022	Learning about indigenous culture and way of thinking	24
Wiley Editor Seminar: Growing your Reviewer Database	11/2021	Improving editor skills	2
Vectoring to and within porphyry copper systems (Univ. of BC, Vancouver)	01/2020	New research directions	16